Nevada
Environmental
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Project

DOE/NV--1109

National Nuclear Security Administration

Closure Report for Corrective Action Unit 115: Area 25 Test Cell A Facility, Nevada Test Site, Nevada

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Environmental Restoration
Division

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office

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CLOSURE REPORT FOR CORRECTIVE ACTION UNIT 115: AREA 25 TEST CELL A FACILITY, NEVADA TEST SITE, NEVADA

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Las Vegas, Nevada

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CLOSURE REPORT FOR CORRECTIVE ACTION UNIT 115: AREA 25 TEST CELL A FACILITY, NEVADA TEST SITE, NEVADA

Approved By: Sabine T. Curtis Date: 3-2-06

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ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
ALLW	asbestiform low-level waste
BMP	best management practice
BN	Bechtel Nevada
CA	contaminated area
CAS(s)	Corrective Action Site(s)
CAU	Corrective Action Unit
COC(s)	contaminant(s) of concern
CR	Closure Report
CSM	conceptual site model
DOE	U.S. Department of Energy
DOE/NV	U.S. Department of Energy, Nevada Operations Office (used prior to April 2001)
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FFACO	*Federal Facility Agreement and Consent Order*
ft	foot (feet)
ft^3	cubic foot (feet)
FY	fiscal year
HEPA	high-efficiency particulate air
HW	hazardous waste
ISOCS	In-Situ Object Counting System
LLW	low-level waste
mg/kg	milligram(s) per kilogram
mg/L	milligram(s) per liter
MW	mixed waste
NDEP	Nevada Division of Environmental Protection
NNSA/NSO	U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office
NNSA/NV	U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office
NTS	Nevada Test Site

ACRONYMS AND ABBREVIATIONS (continued)

NV/YMP	Nevada/Yucca Mountain Project
PCBs	polychlorinated biphenyls
QA	quality assurance
QAPP	Industrial Sites Quality Assurance Project Plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
RMA(s)	Radioactive Materials Area(s)
ROTC	Record of Technical Change
RWMC	Radioactive Waste Management Complex
SAFER	Streamlined Approach for Environmental Restoration
SDG	Sample Delivery Group
SVOC(s)	semi-volatile organic compound(s)
TCLP	Toxicity Characterization Leaching Procedure
TSCA	Toxic Substances Control Act
URMA	Underground Radioactive Materials Area
UW	universal waste
VOC(s)	volatile organic compound(s)
WMA(s)	waste management area(s)
XRF	x-ray fluorescence

EXECUTIVE SUMMARY

The Area 25 Test Cell A Facility is identified in the *Federal Facility Agreement and Consent Order* (FFACO) of 1996 as Corrective Action Unit (CAU) 115. CAU 115 is located on F Road in Area 25 of the Nevada Test Site, approximately 87 miles northwest of Las Vegas, Nevada, and consists of the following four Corrective Action Sites (CASs):

- CAS 25-41-04, Test Cell A Facility
- CAS 25-99-04, Asbestos Wrapped Pipes
- CAS 25-99-05, Asbestos Wrapped Pipes
- CAS 25-99-06, Asbestos Wrapped Pipes

CAU 115 closure activities were conducted from September 2004 to September 2005 according to the FFACO and the Nevada Division of Environmental Protection-approved Streamlined Approach for Environmental Restoration (SAFER) Plan for CAU 115 (U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office, 2004). The approved corrective action alternative was clean closure. However, because some of the concrete was found to be radiologically activated and could not be decontaminated to meet free release levels, the site was closed in place and a use restriction was implemented under an approved Record of Technical Change to the SAFER Plan, which is included as Appendix G of this report.

Site characterization data and process knowledge indicated that significant surface areas were radiologically contaminated above release limits and that regulated and/or hazardous wastes were present in the facility. The closure activities included:

- Removal of all hazardous and regulated wastes
- Decontamination, demolition, and disposal of Buildings 3113, 3113A, and 3113B and related equipment and structures
- Characterization and partial decontamination of the concrete reactor pad and impacted concrete surfaces
- Removal of the dewar as a best management practice
- Performance of final radiological survey to establish appropriate radiological controls and document final site conditions
- Posting of radiological warning and use restriction signs

Closure activities generated waste streams consisting of asbestos-containing material, asbestiform low-level waste, asbestiform mixed waste, non-hazardous sanitary waste, hazardous waste, low-level waste, mixed waste, Toxic Substances Control Act regulated waste, used oil, and universal waste. Waste minimization activities included segregation of waste streams, recycling, and size reduction. Some wastes exceeded land disposal restriction limits and required offsite treatment prior to disposal. Other wastes meeting land disposal restrictions were disposed of in appropriate onsite or offsite landfills. Waste disposition documentation is included as Appendix D of this report.

Extensive final radiological verification surveys were performed to determine the radiological condition of the remaining concrete slab. The survey results are presented in Appendix C of this report, and use restriction documentation is included as Appendix E of this report. The proposed post-closure requirements consist of annual site inspections to determine the condition of fencing and postings. The post-closure plan is presented in detail in Section 5.2.

1.0 INTRODUCTION

This Closure Report (CR) documents the closure activities for Corrective Action Unit (CAU) 115, Area 25 Test Cell A Facility, according to the *Federal Facility Agreement and Consent Order* (FFACO) of 1996 and the Nevada Division of Environmental Protection (NDEP)-approved Streamlined Approach for Environmental Restoration (SAFER) Plan (U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office [NNSA/NSO], 2004). CAU 115 is located on F Road in Area 25 of the Nevada Test Site (NTS), approximately 87 miles northwest of Las Vegas, Nevada (Figure 1). CAU 115 consists of the following four Corrective Action Sites (CASs):

- CAS 25-41-04, Test Cell A Facility
- CAS 25-99-04, Asbestos Wrapped Pipes
- CAS 25-99-05, Asbestos Wrapped Pipes
- CAS 25-99-06, Asbestos Wrapped Pipes

Figure 2 shows the boundary of the CAU and the general layout of the facility. CAS 25-41-04 included Buildings 3113, 3113A, 3113B and related equipment, but did not include any piping or soil below the building foundations. CAS 25-99-04 included piping located south of Building 3113A and west of the concrete reactor pad. CAS 25-99-05 included piping within Building 3113A. CAS 25-99-06 included piping on the roof of the facility.

1.1 PURPOSE

This CR describes the activities performed to close CAU 115, Area 25 Test Cell A Facility, as presented in the NDEP-approved SAFER Plan (NNSA/NSO, 2004). The SAFER Plan includes a summary of the site history, process knowledge, and closure standards. This CR provides a summary of the completed closure activities, documentation of waste disposal, and analytical and radiological data to confirm that the remediation goals were met and to document final site conditions.

The approved closure alternative as presented in the SAFER Plan for CAU 115 (NNSA/NSO, 2004) was clean closure; however, closure in place was implemented under a Record of Technical Change (ROTC) to the SAFER Plan when radiological surveys indicated that the concrete reactor pad was radiologically activated and could not be decontaminated to meet free release levels. The ROTC is included as Appendix G of this report.

1.2 SCOPE

The objectives of closure were to remove any trapped residual liquids and gases, dispose regulated and hazardous waste, decontaminate removable radiological contamination, demolish and dispose aboveground structures, remove the dewar as a best management practice (BMP), and characterize and restrict access to all remaining radiological contamination. Radiological contaminants of concern (COCs) included cobalt-60, cesium-137, strontium-90, uranium-234/235/236/238, and plutonium-239/240. Additional COCs included Resource Conservation and Recovery Act (RCRA) metals, polychlorinated biphenyls (PCBs), and asbestos.

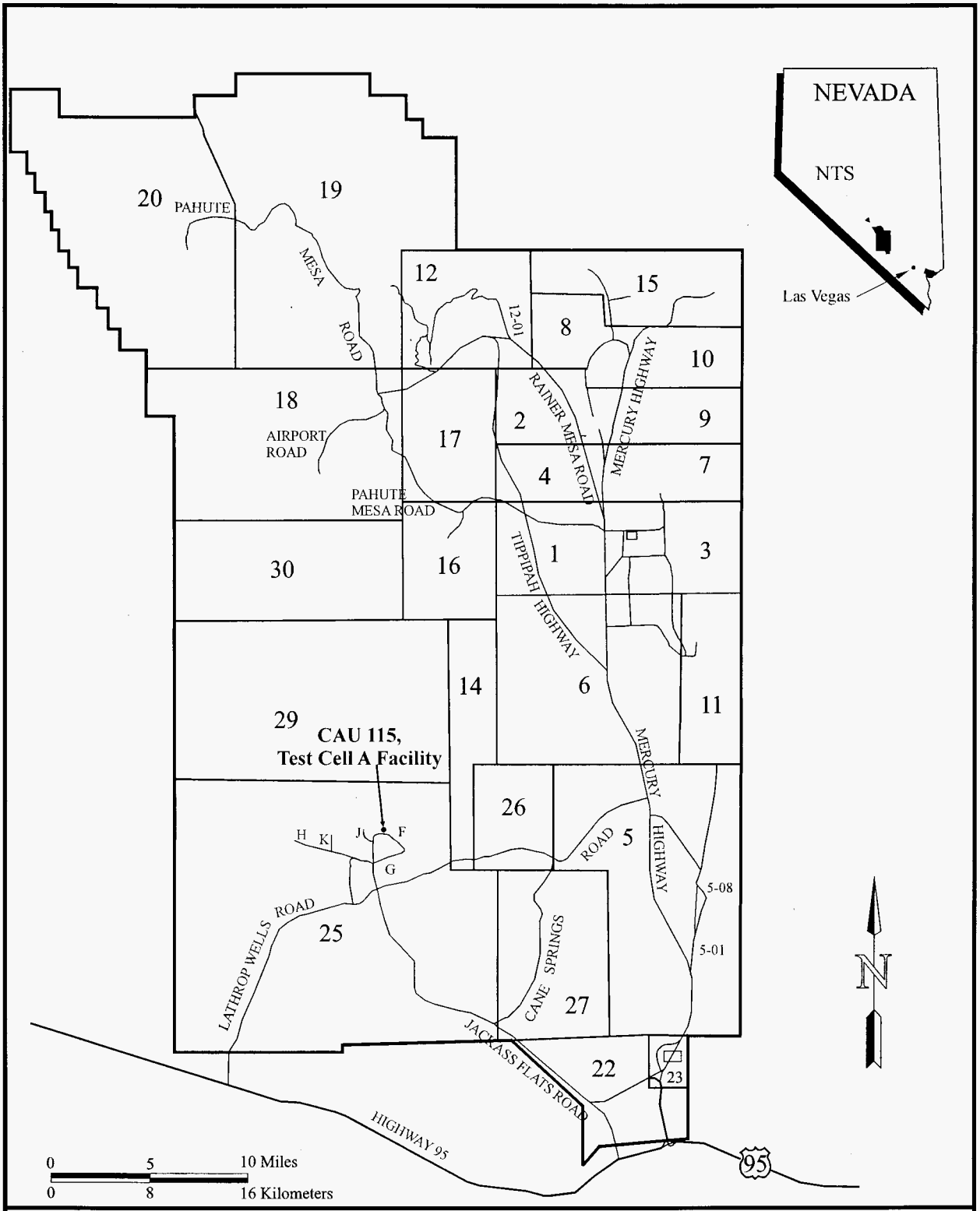

FIGURE 1
CAU 115 SITE LOCATION MAP

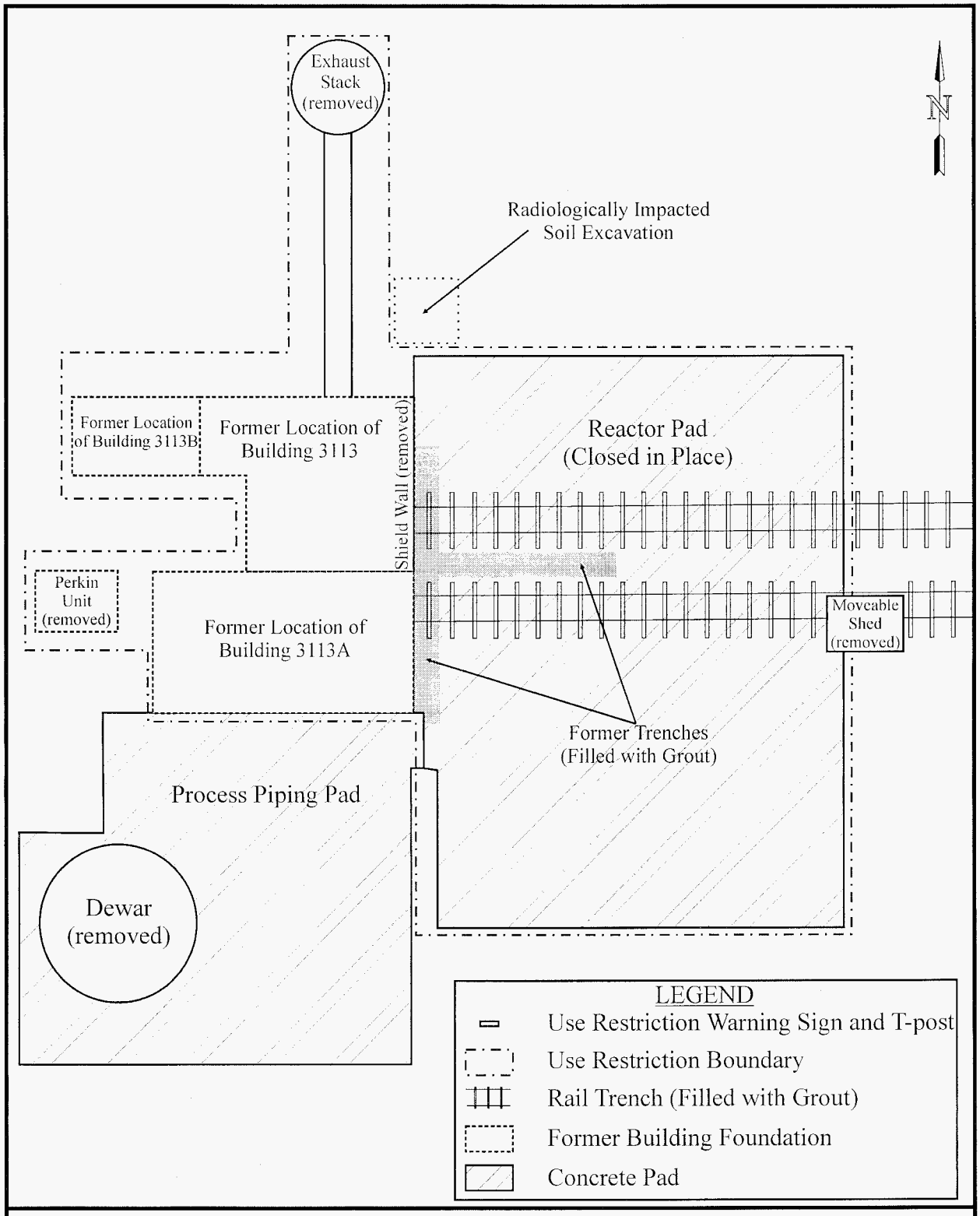

FIGURE 2
CAU 115 BOUNDARY AND FACILITY LAYOUT

The scope of work included the following activities:

- Mitigation of safety hazards
- Removal of trapped residual liquids and gases
- Removal of all hazardous and regulated wastes
  - Asbestos-containing material (ACM) (pipe/conduit insulation, roof mastic sealant)
  - Lead (bricks, wool)
  - Mercury (circuit boards)
  - Cadmium (foil covering insulated pipe/conduit)
  - PCBs (fluorescent light ballasts, paint)
- Decontamination, demolition, and disposal of Buildings 3113, 3113A, and 3113B and related equipment and structures
- Characterization and decontamination of removable radiological contamination on the reactor concrete pad and building foundations
- Removal of the dewar as a BMP
- Performance of final radiological survey to establish appropriate radiological controls and document final site conditions
- Posting of radiological and use restriction warning signs
- Appropriate disposal of all generated waste

Clean closure and free release of the site, as originally planned, was not possible due to radiological activation of the concrete near the former location of the reactor. Soil and railroad ties in trenches on and adjacent to the concrete reactor pad were also significantly radiologically impacted. The scope was modified to grout the trenches. Also, additional decontamination activities would not reduce the posting requirements. Therefore, fixed contamination in the reactor pad concrete and the radiologically impacted soil and railroad ties within the grouted trenches were closed in place, and a use restriction was implemented to mitigate potential for future disturbance.

1.3 CLOSURE REPORT CONTENTS

This CR includes the following sections:

- Section 1.0 - Introduction
- Section 2.0 - Closure Activities
- Section 3.0 - Waste Disposition
- Section 4.0 - Closure Verification Results
- Section 5.0 - Conclusions and Recommendations
- Section 6.0 - References

- Appendix A - Data Quality Objectives
- Appendix B - Sample Analytical Results
- Appendix C - Final Radiological Survey Results
- Appendix D - Waste Disposition Documentation
- Appendix E - Use Restriction Documentation
- Appendix F - Site Closure Photographs
- Appendix G - Record of Technical Change to the SAFER Plan
- Library Distribution List

This report was developed using information and guidance from the following documents:

- SAFER Plan for CAU 115 (NNSA/NSO, 2004)
- Industrial Sites Quality Assurance Project Plan (QAPP) (U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office [NNSA/NV], 2002)

1.3.1 Data Quality Objectives

The data quality objectives used for closure of CAU 115 were presented in Appendix A.1 of the SAFER Plan (NNSA/NSO, 2004) and are included as Appendix A of this report.

The conceptual site model (CSM) was developed and presented in the approved SAFER Plan (NNSA/NSO, 2004). The CSM was based on process knowledge, historical background information, site analysis, and personnel interviews. The CSM assumed that radiologically impacted areas of the facility were limited to the reactor pad, Building 3130 (moveable shed), the shield wall, the concrete pad and pipes on the south side of Building 3113A, the roofs of Buildings 3113 and 3113A, and the floor drain in Room 1. The CSM also assumed that PCBs were present in fluorescent light ballasts and paint, the majority of the solid lead present was not radiologically impacted, ACM was present as roof mastic sealant and pipe insulation, and mercury was present only in fluorescent light bulbs. The actual site conditions varied from the CSM in that significantly larger areas of radiological contamination were present that were not practical to decontaminate, solid lead items throughout the facility were radiologically contaminated, mercury was present in approximately 800 circuit boards, and cadmium was present in foil surrounding insulated pipes.

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2.0 CLOSURE ACTIVITIES

This section details the specific activities completed during the closure of CAU 115, deviations from the CAU 115 SAFER Plan as approved, the schedule of completed activities, and the final site plan.

2.1 DESCRIPTION OF CORRECTIVE ACTION ACTIVITIES

Closure activities were conducted from September 2004 through September 2005 by the Bechtel Nevada (BN) Environmental Restoration (ER) group. The following sections detail the activities completed during the closure of CAU 115. Photographs in Appendix F of this report document the state of the site before corrective actions were implemented, field work in progress, and the site conditions after completion of work.

2.1.1 Preplanning and Site Preparation

Closure activities for CAU 115 were completed using the NDEP-approved SAFER Plan (NNSA/NSO, 2004). Prior to site closure activities, the following documents were prepared:

- National Environmental Policy Act checklist
- Site-Specific Health and Safety Plan
- Field Management Plan
- NNSA/NSO Real Estate/Operations Permits
- BN work control packages
- Sampling and Analysis Plan
- Demolition Plan
- Controlled Explosive Demolition Plan
- Radiological Monitoring Survey Plan

2.1.2 Hantavirus Cleanup

Prior to beginning closure activities and throughout closure activities as needed, potential Hantavirus-bearing rodent droppings were treated, removed, and disposed. Hantavirus waste generated from inside a radiologically contaminated area (CA) was managed as low-level waste (LLW). Waste generated outside of a CA was radiologically surveyed. Survey results indicated that the waste was free of radiological impact, and the waste was disposed of as sanitary waste.

2.1.3 Radiological Surveys

Extensive radiological surveys were performed prior to and throughout closure activities to determine the presence of contamination, ensure that no contamination was migrating from the CAs, verify the effectiveness of and guide decontamination activities, monitor worker exposure, and determine final waste disposition. All portable survey instruments were calibrated to a known radiological source on a daily basis. Radiological survey reports were completed following procedures outlined in the Nevada/Yucca Mountain Project (NV/YMP) Radiological

Control Manual (U.S. Department of Energy, Nevada Operations Office [DOE/NV], 2004). Calibration records, copies of the radiological survey reports, and supporting documentation are on file in the Radiological Control offices in Mercury, Nevada, and are available upon request. A summary of the radiological survey results is included as Appendix C of this report.

2.1.4 Characterization of Fluids and Piping

All piping was inspected for the presence of residual gases, fluids, and pressure before asbestos abatement activities and cutting or removal of pipes. In addition, all electrical lines and utilities were verified to be de-energized.

Prior to removal of equipment, all reservoirs were inspected for the presence of hydraulic oil and lubricating fluids. Fluids were drained and sampled to determine if PCBs were present. Analytical results for PCBs (Section 3.3, Table 4, Sample CAU1150503) were below the regulatory limit of 0.74 milligrams per kilogram (mg/kg), so the fluids were recycled as used oil. Approximately 20 gallons of lubricating fluid and 20 gallons of hydraulic oil were transferred to BN Fleet Services for recycling.

2.1.5 Removal of Hazardous/Regulated Waste

Hazardous and regulated materials were removed from Buildings 3113, 3113A, and 3113B and related facilities prior to demolition of the structures.

2.1.5.1 Asbestos-Containing Material

The roof mastic sealant located around roof penetrations on Buildings 3113 and 3113A was determined to be ACM. The material was removed and double bagged. Radiological surveys established that the roof mastic sealant was radiologically impacted and was therefore managed as asbestiform low-level waste (ALLW). The material is currently staged onsite and will be transported to the Area 5 Radioactive Waste Management Complex (RWMC) for disposal by the end of fiscal year (FY) 2006. Waste disposition documentation for the ACM will be provided to the NDEP following disposal.

A total of approximately 520 linear feet (ft) of piping insulated with friable asbestos was removed and double wrapped in plastic. Other ACM, including a fire hose, two fire suits, electrical cables, pipe elbows, and putty, were removed and double bagged. The ACM was analyzed by In-Situ Object Counting System (ISOCS) to determine whether it is radiologically impacted. After the results are evaluated, any ACM that is free of radiological impact will be transported to the Area 23 Sanitary Landfill for disposal. Any ACM that is determined to be radiologically impacted will be disposed of as ALLW at the Area 5 RWMC. A total of approximately 75 cubic feet (ft^3) of ACM is currently staged onsite awaiting disposal. The waste will be disposed of appropriately based on ISOCS results by the end of FY 2006. Waste disposition documentation for the ACM will be provided to the NDEP following disposal.

In addition, ACM piping covered with insulating foil was removed and double bagged. The foil was sampled and determined to be hazardous (Section 2.1.5.4), and radiological surveys were performed. Depending on the results of the radiological surveys, the material was classified as either hazardous waste (HW) or asbestiform mixed waste (MW). A total of approximately 500 ft^3 of the material was classified as HW and transported to the Area 5 HW Storage Unit. It was shipped to a permitted offsite facility for treatment and disposal on April 4, 2005. A total of

approximately 1,330 ft^3 of the material was classified as asbestiform MW and transported to the Area 5 TRU Pad. It was shipped to a permitted offsite facility for treatment and disposal on January 24, 2006.

2.1.5.2 Lead

Solid lead in the form of sheets, doors, bricks, and wool was used as shielding material in Building 3113. Other lead items included a lead collar and a lead-lined box. All lead-containing materials were removed and surveyed for radiological contamination. The lead was determined to be radiologically impacted and was managed as MW. A total of approximately 76,300 pounds of lead that was radiologically contaminated was transported to the Area 5 TRU Pad. The lead was shipped to a permitted offsite facility for treatment and disposal on September 21, 2005.

Field screening using x-ray fluorescence (XRF) indicated that the paint in Building 3113 contained lead. To determine the waste disposal pathway for the paint, paint samples were collected and analyzed by Toxicity Characterization Leaching Procedure (TCLP) for lead. Leachable lead concentrations in the paint did not exceed the RCRA regulatory level of 5.0 milligrams per liter (mg/L) for hazardous waste (Section 3.3, Table 4, Samples 1153113-1, 1153113B-1, 1153113B-2, and 115N-1).

Swipe samples indicated several surfaces in the facility were contaminated with lead dust. Contaminated surfaces were washed and/or vacuumed with a high-efficiency particulate air (HEPA) vacuum to remove surface contaminants and loose paint chips prior to demolition activities.

2.1.5.3 Mercury

Approximately 800 circuit boards containing mercury were removed and containerized in drums. The circuit boards were surveyed and determined to be free of radiological contamination. The drums were transported to the Area 5 HW Storage Unit. The circuit boards were shipped to a permitted offsite facility for treatment and disposal on September 13, 2005.

2.1.5.4 Cadmium

Insulating foil covering piping and loose foil scattered throughout the facility was identified as possibly containing hazardous constituents. Two representative samples of the foil were collected and analyzed for TCLP metals. The sample results indicated that the foil contained cadmium above the RCRA regulatory level of 1.0 mg/L for hazardous waste (Section 3.3, Table 4, Samples CAU115050101 and CAU115050201). The foil was removed with the piping/conduit and asbestos that it was attached to, containerized in drums, and radiologically surveyed. A total of approximately 1,330 ft^3 of the material was radiologically impacted and was transported to the Area 5 TRU Pad. The material was shipped as MW to a permitted offsite facility for treatment and disposal on January 24, 2006. A total of approximately 500 ft^3 of the material was free of radiological contamination and was transported to the Area 5 HW Storage Unit. The material was shipped as HW to a permitted offsite facility for treatment and disposal on September 13, 2005.

2.1.5.5 PCBs

Equipment containing hydraulic oil was suspected to contain PCBs in concentrations greater than the land disposal limits. All fluids were drained, and one representative sample was collected and analyzed for PCBs. PCBs were not detected at concentrations exceeding the regulatory limit of 0.74 mg/kg (Section 3.3, Table 4, Sample CAU1150503), and the fluids were transferred to BN Fleet Services for recycling.

Previous sample results indicated that paint on many of the building surfaces contained PCBs at concentrations exceeding the NTS sanitary landfill limit. A total of approximately 15 ft^3 of paint was removed from the building surfaces and reactor pad by scabbling and HEPA vacuums and was containerized in drums. Radiological surveys indicated that the paint was also radiologically impacted. The paint chips were managed as radioactive PCB bulk-product waste and are currently staged onsite. The paint chips will be transported to the NTS RWMC for disposal by the end of FY 2006. Waste disposition documentation will be provided to the NDEP following disposal.

In addition, 12 fluorescent light ballasts containing PCBs were removed and managed as Toxic Substances Control Act (TSCA) waste. The ballasts were found to be leaking, transported in drums to a permitted offsite facility on January 3, 2006, and incinerated on January 22, 2006.

2.1.5.6 Universal Waste

Six lead acid batteries and 38 fluorescent light bulbs were removed from the facility and managed as universal waste (UW). The batteries and fluorescent light bulbs were transported to an offsite facility for recycling. Fire extinguishers throughout the facility were also removed and transported to the Mercury fire station for recharging and reuse.

2.1.6 Removal of Radiologically Impacted Soil

A total of approximately 100 ft^3 of radiologically impacted soil was removed from an area adjacent to the northwest corner of the concrete pad and packaged in B25 boxes. This soil was outside the CAU boundary but was removed as a BMP due to elevated radiological levels. The soil is currently staged onsite and will be disposed of as LLW at the NTS RWMC by the end of FY 2006. Waste disposition documentation for the soil will be provided to the NDEP following disposal.

A total of approximately 125 ft^3 of radiologically impacted soil and tumbleweeds was removed from the trenches located on the reactor pad and packaged in B25 boxes. The soil is currently staged onsite and will be disposed of as LLW at the NTS RWMC by the end of FY 2006. Waste disposition documentation for the soil will be provided to the NDEP following disposal. The trenches were grouted with concrete to increase shielding of the remaining contamination and allow the area to be posted as an Underground Radioactive Materials Area (URMA).

2.1.7 Characterization and Decontamination of Radiologically Impacted Surfaces

Concrete core samples were collected from the shield wall to determine compressive strength to refine the demolition strategy. Concrete core samples from the shield wall, the roof of Building 3113, the reactor pad, and other concrete surfaces were analyzed by ISOCS to determine the levels of radiological contamination and guide decontamination and demolition activities.

Surfaces impacted by radionuclides, including the roof of Building 3113 and the reactor pad, were decontaminated using a combination of aggressive (e.g., scabbling) and non-aggressive (e.g., HEPA vacuuming) methods. Fixed contamination within the roof paint was removed using aggressive methods while decontamination activities on the reactor pad were limited to removal of loose contamination. ISOCS data indicated that the pad was activated to a depth of 2 ft. Therefore, aggressive decontamination to remove the pad surface would not have lowered dose readings to below regulatory levels.

2.1.8 Demolition of Aboveground Structures

Buildings 3113, 3113A, and 3113B were torn down using conventional demolition methods. As a BMP, Building 3130 (moveable shed), Building 3134 (hydrogen fill stations), the dewar, the exhaust stack system, and the Perkin unit were also removed or demolished by conventional means. Heavy equipment, including demolition shears, were used to knock down and size-reduce the buildings and associated structures. Radiological surveys were performed on the demolition debris.

Due to the concrete thickness and heavy reinforcements, the shield wall was demolished using explosives. A BN subcontractor was responsible for the demolition activities along with the size-reduction and staging of the debris. After demolition, the debris from the shield wall was radiologically surveyed.

The dewar, which had been used to store liquid nitrogen for the nuclear reactor tests, was removed as a BMP. The top of the dewar was accessed, and the Perlite insulation located in the space between the inner and outer walls of the dewar was sampled and analyzed by ISOCS to determine appropriate handling and disposal. The Perlite was not radiologically impacted above the Area 9 U10c disposal limits. Demolition shears were used to remove the top of the dewar, and a total of approximately 7,500 ft^3 of Perlite insulation was removed and transported as sanitary waste at the Area 9 U10c Landfill from July 11, 2005, through September 1, 2005. The remaining metal structure was torn down and size-reduced using shears and torches, and the debris was screened for radiological contamination.

During demolition activities, radiological surveys were performed on the demolition debris from Buildings 3113, 3113A, 3113B, 3130, 3134, the dewar, the exhaust stack system, the Perkin unit, and the shield wall. The debris was segregated into sanitary waste and LLW streams. A total of approximately 13,500 ft^3 of demolition debris was disposed of at the Area 9 U10c Landfill from February 14, 2005, through June 7, 2005. A total of approximately 40,000 ft^3 of radiologically impacted debris is currently staged onsite. The radiologically impacted debris will be disposed of as radioactive PCB bulk-product waste due to the fact that the majority of the facility was painted with paint containing PCBs. The demolition debris will be disposed of at the NTS RWMC by the end of FY 2006. Waste disposition documentation for the debris will be provided to the NDEP following disposal.

After demolition of the aboveground structures, remaining piping was cut at the ground surface. The pipe ends, floor drains, and other openings were sealed with cement.

2.1.9 Final Radiological Survey

After all demolition activities were completed and waste and debris was removed or staged, final radiological surveys were performed to document final site conditions and establish appropriate radiological controls. A summary of the results is included as Appendix C of this report.

2.1.10 Implementation of Use Restriction

Due to radiological activation of the concrete reactor pad and remaining radiologically impacted soil and railroad ties, clean closure was not practical for CAU 115. A use restriction was established for the remaining radiological contamination in the reactor pad. The locations of the corners of the use-restricted area are listed in Table 1. Figure 3 shows the boundary of the use-restricted area.

The reactor pad was posted as an URMA. Radiological postings were installed every 100 ft. In addition, use restriction warning signs were posted on T-posts near each of the four corners of the reactor pad according to the FFACO Use Restriction Posting Guidance (FFACO, 2003).

TABLE 1. CAU 115 USE-RESTRICTED AREA, UTM, ZONE 11, NAD 27, METERS

CORNER	NORTHING	EASTING
Northeast	4,076,007.5	566,256.7
Southeast	4,075,962.9	566,256.7
Southwest	4,075,962.9	566,230.3
Northwest	4,076,007.5	566,230.3

2.2 DEVIATIONS FROM THE SAFER PLAN AS APPROVED

Closure activities followed the approach specified in the SAFER Plan (NNSA/NSO, 2004). Exceptions to the original SAFER Plan were documented in a ROTC, which is included as Appendix G of this report. Radiological surveys and ISOCS core samples collected during closure activities revealed conditions that were not anticipated during project planning, resulting in a ROTC to the SAFER Plan. The ROTC addressed the following:

- Clean closure would not be achieved for CAU 115 due to radiological activation of the concrete reactor pad as determined by ISOCS analysis. The reactor pad would instead be posted as an URMA, and a use restriction would be implemented. A final radiological survey would be conducted to establish proper controls.
- The railroad trenches would be filled with grout, rather than removing the fixed contamination present on the interior surface, since removing fixed contamination would not remove the posting requirements on the reactor pad due to radiological activation of the concrete. Secondary reasons for filling the trenches included covering and shielding the fixed contamination located in the trenches, reducing worker exposure, and shortening the duration of decontamination activities.
- The dewar would be removed as a BMP.

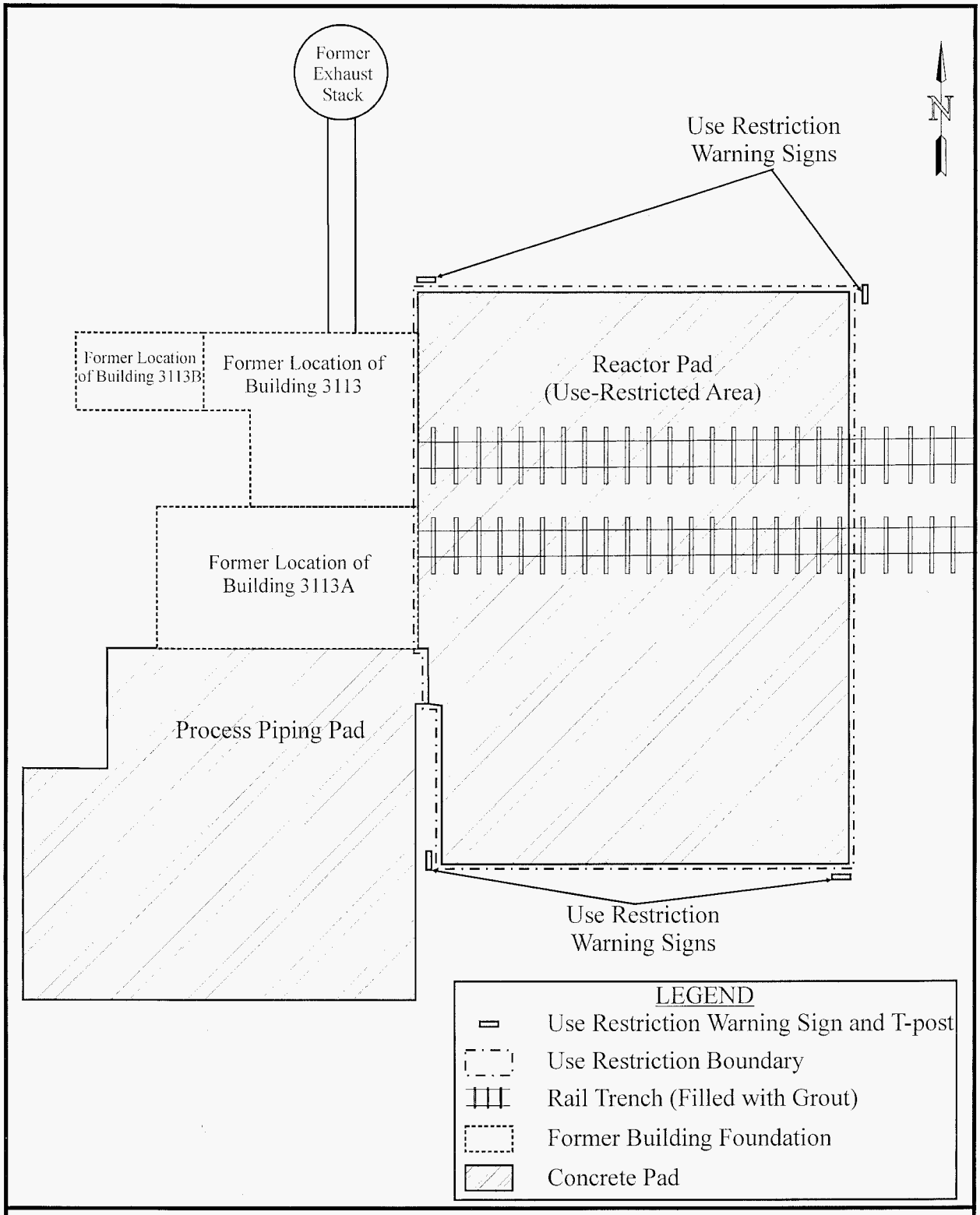

FIGURE 3
CAU 115 USE RESTRICTION BOUNDARY

2.3 CORRECTIVE ACTION SCHEDULE AS COMPLETED

The closure activities began in September 2004 and were completed in September 2005. Details of the closure field activities schedule are provided in Table 2.

TABLE 2. CAU 115 CLOSURE ACTIVITIES SCHEDULE

ACTIVITY	START DATE	END DATE
Mobilization and Site Setup	September 30, 2004	January 12, 2005
Removal of Hazardous and Regulated Waste	January 12, 2005	March 24, 2005
Decontamination Activities and Removal of Radiologically Impacted Soil	March 29, 2005	June 03, 2005
Demolition of Aboveground Structures	May 12, 2005	September 07, 2005
Final Radiological Survey	July 07, 2005	July 18, 2005
Demobilization	September 07, 2005	September 13, 2005

2.4 SITE PLAN/SURVEY PLAT

Remaining radiological contamination for CAU 115 was closed in place with administrative controls (i.e., a use restrictions was implemented). A figure showing the locations of the surveyed points delineating the use-restricted area is included in Appendix E of this report.

3.0 WASTE DISPOSITION

This section describes the waste streams generated during closure activities and their final disposition. Waste streams generated included ACM, ALLW, asbestiform MW, HW, LLW, MW, TSCA regulated waste, used oil, UW, and non-hazardous sanitary waste. All waste was characterized and managed according to state and federal regulations, U.S. Department of Energy (DOE) orders, and BN procedures. Waste characterization sample analytical results are included in Appendix B of this report. Waste disposition is summarized in Table 3 and discussed in detail in the following sections. Waste disposition documentation is included in Appendix D of this report.

TABLE 3. CAU 115 WASTE DISPOSITION SUMMARY

DESCRIPTION	AMOUNT	WASTE TYPE	DISPOSITION
Non-Impacted ACM	Amount Pending*	ACM	Staged onsite pending ISOCS results for disposal at the Area 23 Sanitary Landfill by the end of FY 2006
Radiologically Impacted ACM	Amount Pending*	ALLW	Staged onsite pending ISOCS results for disposal at the Area 5 RWMC by the end of FY 2006
Radiologically Impacted ACM with Cadmium Foil	1,330 ft^3	Asbestiform MW	Transported to a permitted offsite facility for treatment and disposal on 01/24/2006
Cadmium Foil	500 ft^3	HW	Transported to a permitted offsite facility for treatment and disposal on 09/13/2005
Circuit Boards	800 circuit boards		
Vacuum Tubes	4 tubes		
Soil from northwest corner of reactor pad	100 ft^3	LLW	Staged onsite for disposal at the NTS RWMC by the end of FY 2006
Soil and tumbleweeds from railroad trenches	125 ft^3		
Construction Debris	40,000 ft^3		
Solid Lead	76,300 pounds	MW	Transported to a permitted offsite facility for treatment and disposal on 09/21/2005
Fluorescent Light Ballasts	12 bulbs	TSCA Waste	Transported to a permitted offsite facility on 01/03/2006 for incineration on 01/22/2006
Paint Chips	15 ft^3	Radioactive PCB Bulk-Product Waste	Staged onsite for disposal at the NTS RWMC by the end of FY 2006
Lubricating Fluid	20 gallons	Used Oil	Recycled at BN Fleet Services
Hydraulic Oil	20 gallons		
Lead Acid Batteries	6 batteries	UW	Recycled at an offsite facility
Fluorescent Light Bulbs	38 bulbs		
Construction Debris and Perlite	21,000 ft^3	Sanitary Waste	Disposed of at the Area 9 U10c Landfill

* A total of 75 ft^3 of ACM is currently staged onsite. After review of ISOCS analysis results, the waste will either be disposed of as ACM at the Area 23 Sanitary Landfill or as ALLW at the Area 5 RWMC by the end of FY 2006.

3.1 WASTE MINIMIZATION

Industry standard waste minimization practices were applied throughout the course of closure activities. These practices included:

- Using highly efficient industry standard decontamination tools that removed radiologically impacted material
- Using field instrumentation (i.e., survey instruments, ISOCS analysis) to identify the areas requiring decontamination
- Using a portable XRF unit to field screen for lead contamination
- Using laboratory analysis and ISOCS to correctly characterize and classify waste streams
- Recycling items that had potential for future use, including lubricating fluid, hydraulic oil, lead acid batteries, and fluorescent light bulbs

3.2 WASTE MANAGEMENT

All waste was managed according to applicable state and federal regulations, DOE orders, the CAU 115 SAFER Plan (NNSA/NSO, 2004), BN procedures, and company directives.

Waste management areas (WMAs) were established throughout the project, as needed. All WMAs were identified with appropriate signs and boundaries to restrict unauthorized access. The WMAs were inspected on a weekly or monthly basis, as required, to ensure that all containers were intact, not leaking, and not exceeding storage duration times as specified by state regulations and BN operating procedures. Applicable WMAs were posted as Radioactive Materials Areas (RMAs) whenever radiological waste was stored in the area. Upon removal of radiologically impacted waste, the RMA was surveyed and de-posted.

Waste containers were purchased either new or reconditioned. All containers were inspected prior to use to verify that they were in good condition (e.g., no leaks, rust, or dents), lined or made of material that would not react with the waste, and met U.S. Department of Transportation requirements. The containers remained closed while stored unless waste was being added or removed. Containers were also handled in such a manner that the integrity of the container was not compromised. Drums containing liquid regulated waste were stored on spill containment pallets. Appropriate labels were affixed and relevant information was marked on the containers with an indelible marker. All information was legible and clearly visible.

3.3 WASTE CHARACTERIZATION

Waste streams were characterized according to the CAU 115 SAFER Plan (NNSA/NSO, 2004), BN Solid Waste Operations, BN Hazardous Waste Operations, and BN Waste Generator Services procedures. Laboratory samples were collected, sealed with a custody seal, cooled to four degrees Celsius, and logged on a chain of custody. The waste characterization samples collected during closure activities are listed in Table 4, and summary results are included in Appendix B of this report. Waste was also screened for radiological contamination using radiological survey instruments and ISOCS analysis.

TABLE 4. CAU 115 WASTE CHARACTERIZATION SAMPLE RESULTS

SAMPLE NUMBER	DATE COLLECTED	LOCATION	SAMPLE DELIVERY GROUP (SDG)	SAMPLE RESULTS								
				TCLP METALS[a]	PCBs	TCLP VOCs[b]	TCLP SVOCs[c]	TOTAL METALS[d]	GAMMA SPECTROSCOPY	STRONTIUM-90	ISOTOPIC PLUTONIUM	ISOTOPIC URANIUM
CAU1150501	12/16/2004	Foil	V2381	<RL[e]	--[f]	--	--	--	--	--	--	--
CAU1150502				Cadmium= 9.370 mg/L	--	--	--	--	--	--	--	--
CAU1150503	03/08/2005	Hydraulic Oil	V2427 (rad) V2428 (non-rad)	--	<RL	--	--	--	--	--	--	--
CAU1150508	03/08/2005	Waste Water		--	--	<RL	<RL	<RL	<RL	<RL	<RL	<RL
CAU1150509				--	--	<RL	--	--	--	--	--	--
1153113-1	04/25/2005	Paint Chips	V2467	<RL	--	--	--	--	--	--	--	--
1153113B-1				<RL	--	--	--	--	--	--	--	--
1153113B-2				<RL	--	--	--	--	--	--	--	--
115N-1				<RL	--	--	--	--	--	--	--	--

[a] TCLP Metals = TCLP arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver (Samples 1153113-1, 1153113B-1, 1153113B-2, and 155N-1 were only analyzed for TCLP lead)
[b] VOCs = volatile organic compounds
[c] SVOCs = semi-volatile organic compounds
[d] Total Metals = total arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver
[e] <RL = results did not exceed regulatory limits
[f] -- = parameter not analyzed for in sample

3.4 WASTE STREAMS AND DISPOSAL

Waste streams generated during closure activities at CAU 115 included ACM, ALLW, asbestiform MW, HW, LLW, MW, TSCA regulated waste, used oil, UW, and non-hazardous sanitary waste. Waste disposition documentation is included in Appendix D of this report.

3.4.1 Asbestos-Containing Material

A total of approximately 75 ft^3 of ACM, including pipe insulation, a fire hose, two fire suits, electrical cables, pipe elbows, and putty, were analyzed by ISOCS to determine whether they are radiologically impacted. The material is currently being stored onsite in drums. After the ISOCS results are evaluated, ACM that is not radiologically impacted will be transported to the Area 23 Sanitary Landfill for disposal. The ACM will be disposed of by the end of FY 2006, and waste disposition documentation will be provided to the NDEP following disposal.

3.4.2 Asbestiform Low-Level Waste

Any of the ACM that is currently onsite awaiting ISOCS results evaluation (Section 3.4.1) that is determined to be radiologically impacted above sanitary landfill limits will be disposed of as ALLW at the Area 5 RWMC by the end of FY 2006, and waste disposition documentation will be provided to the NDEP following disposal.

3.4.3 Asbestiform MW

A total of approximately 1,330 ft^3 of ACM piping covered with foil containing hazardous levels of cadmium was radiologically impacted. The material was accumulated in drums and transported to the Area 5 TRU Pad. The MW was shipped to a permitted offsite facility for treatment and disposal on January 24, 2006.

3.4.4 Hazardous Waste

HW that was determined to be free of radiological impact included approximately 500 ft^3 of cadmium foil, approximately 800 mercury-containing circuit boards, and 4 vacuum tubes. HW was stored in drums and transported to the Area 5 HW Storage Unit. It was shipped to a permitted offsite facility for treatment and disposal on September 13, 2005.

3.4.5 Low-Level Waste

A total of approximately 225 ft^3 of LLW was accumulated in B25 boxes and is currently staged onsite to be transported to the NTS RWMC for disposal by the end of FY 2006. This included approximately 100 ft^3 of soil excavated from a location near the northwest corner of the reactor pad and approximately 125 ft^3 of soil and tumbleweeds removed from the railroad trenches on the reactor pad. Waste disposition documentation will be provided to the NDEP following disposal.

3.4.6 Mixed Waste

A total of approximately 76,300 pounds of radiologically impacted solid lead, including bricks, wool, doors, and a lead-lined box, was packaged in drums and transported to the Area 5 TRU

Pad. The lead was shipped to a permitted offsite facility for treatment and disposal on September 21, 2005.

3.4.7 TSCA-Regulated Waste

A total of approximately 15 ft^3 of paint chips impacted with PCBs and radionuclides was managed as radioactive PCB bulk-product waste. The paint was packaged in drums and is currently staged onsite. It will be transported to the NTS RWMC for disposal by the end of FY 2006. In addition, 12 fluorescent light ballasts containing PCBs were transported in drums to a permitted offsite facility on January 3, 2006, and incinerated on January 22, 2006.

In addition, a total of approximately 40,000 ft^3 of radiologically impacted construction debris from the demolition of structures at Test Cell A is currently staged onsite. The majority of the facility was painted with paint containing PCBs, so the debris will be disposed of as radioactive PCB bulk-product waste. The demolition debris will be disposed of at the NTS RWMC by the end of FY 2006. Waste disposition documentation for the debris will be provided to the NDEP following disposal.

3.4.8 Used Oil

Fluids that were drained from equipment reservoirs were determined to be free of radiological and hazardous constituents and were recycled as used oil. Approximately 20 gallons of lubricating fluid and 20 gallons of hydraulic oil were transferred to BN Fleet Services for recycling.

3.4.9 Universal Waste

Various forms of UW were generated during the closure of CAU 115. Six lead acid batteries and 38 fluorescent light bulbs were removed, surveyed, and managed as UW. The batteries and fluorescent light bulbs were transported to an offsite facility for recycling. Fire extinguishers throughout the facility were also removed and transported to the Mercury fire station for recharging and reuse.

3.4.10 Sanitary Waste

A total of approximately 21,000 ft^3 of sanitary construction debris and Perlite was generated during demolition activities at CAU 115. The debris was determined to be sanitary waste, based on radiological surveys. All sanitary waste was transported in end-dump trucks to the Area 9 U10c Landfill for disposal.

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4.0 CLOSURE VERIFICATION RESULTS

To document final site conditions and establish appropriate radiological controls, final radiological surveys were performed. A summary of the results is included in Appendix C of this report.

4.1 DATA QUALITY ASSESSMENT

Accurate and defensible analytical data were collected to verify that waste was properly characterized, managed, and disposed of during CAU 115 closure activities. The following sections describe the quality assurance (QA) / quality control (QC) procedures, data validation process, and a reconciliation of the CSM with actual findings during CAU 115 closure activities. More detail on the QA/QC procedures for CAU 115 can be found in the CAU 115 SAFER Plan (NNSA/NSO, 2004).

4.1.1 Quality Assurance/Quality Control Procedures

Waste characterization samples were collected with disposable polyethylene scoops and placed in appropriately labeled sample containers secured with custody seals. All samples were labeled with a unique sample number, placed on ice, and transported under a chain of custody. Standard QA/QC samples were collected (i.e., one blind duplicate per 20 samples). Samples were analyzed by BN contract laboratories. Analytical results were validated at the laboratory using stringent QA/QC procedures, including matrix spike/matrix spike duplicates, spiked surrogate recovery analysis, verification of analytical results, and data quality indicator requirements. Detailed information regarding the QA/QC program can be found in the Industrial Sites QAPP (NNSA/NV, 2002).

4.1.2 Data Validation

Data validation was performed according to the Industrial Sites QAPP (NNSA/NV, 2002) which is based on the U.S. Environmental Protection Agency (EPA) functional guidelines for data quality (EPA, 1994 and 1999). Data were reviewed to ensure that samples were appropriately processed and analyzed, and that the results are valid. All sample data were internally validated by qualified BN personnel at the Tier I and Tier II levels. No anomalies were discovered in the data that would discredit any of the waste characterization or verification sample results. While only summary laboratory QC data for waste characterization samples are included in Appendix B of this report, the complete data set, including validation reports for waste characterization samples, is maintained in the BN ER project files and available upon request.

4.1.3 Conceptual Site Model

The CSM was developed and presented in the approved SAFER Plan (NNSA/NSO, 2004). The CSM was based on process knowledge, historical background information, site analysis, and personnel interviews. The CSM assumed that radiologically impacted areas of the facility were limited to the reactor pad, Building 3130 (moveable shed), the shield wall, the concrete pad and pipes on the south side of Building 3113A, the roofs of Buildings 3113 and 3113A, and the floor drain in Room 1. The CSM also assumed that PCBs were present in fluorescent light ballasts and paint, the majority of the solid lead present was not radiologically impacted, ACM was

present as roof mastic sealant and pipe insulation, and mercury was present only in fluorescent light bulbs. The actual site conditions varied from the CSM in that significantly larger areas of radiological contamination were present that were not practical to decontaminate, solid lead items throughout the facility were radiologically contaminated, mercury was present in approximately 800 circuit boards, and cadmium was present in foil surrounding insulated pipes.

4.2 USE RESTRICTION

A use restriction has been implemented for CAU 115. Fixed radioactive contamination in the concrete reactor pad and railroad trenches that was not practical to remediate was left in place. Radiological postings identify the reactor pad as an URMA, and use restriction warning signs were posted on T-posts at each of the four corners of the reactor pad to warn against intrusive activity according to the FFACO Use Restriction Posting Guidance (FFACO, 2003). The CAU Use Restriction Information form and a figure showing the locations of the surveyed points delineating the use-restricted area are included in Appendix E of this report. Annual site inspections will be performed to ensure that all signs are in good repair and that the use restriction has been maintained. Details on the post-closure requirements are included in Section 5.2.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The following site closure activities were performed at CAU 115 and are documented in this CR:

- All hazardous and regulated waste was removed from the facility and disposed, including the following:
  - ACM (pipe insulation, roof mastic sealant)
  - Solid lead (bricks, wool)
  - Mercury (circuit boards)
  - Cadmium (foil covering insulated pipes)
  - PCBs (fluorescent light ballasts, paint)
- Buildings 3113, 3113A, and 3113B and related equipment and structures were partially decontaminated, demolished, and disposed.
- The reactor concrete pad was characterized and partially decontaminated.
- The dewar was removed as a BMP.
- Final radiological surveys were performed to establish appropriate radiological controls and document final site conditions.
- Radiological postings and use restriction warning signs were installed.

5.2 POST-CLOSURE REQUIREMENTS

5.2.1 Inspections

Inspections will be performed annually as part of the Decontamination and Decommissioning Program under the Surveillance and Maintenance Plan. Inspections will consist of visual observations to verify that all signs are in good repair and that the use restriction has been maintained. If any maintenance or repair requirements are identified during the inspection, funding will be requested and the repairs scheduled. Any repair or maintenance performed at this site shall be documented in writing at the time of the repair and included in a letter report.

5.3 RECOMMENDATIONS

Since closure activities for CAU 115 have been completed following the NDEP-approved SAFER Plan (NNSA/NSO, 2004) as documented in this report, NNSA/NSO requests the following:

1. A Notice of Completion be provided by the NDEP to the NNSA/NSO for the closure of CAU 115.
2. The transfer of CAU 115 from Appendix III to Appendix IV, Closed Corrective Action Units, of the FFACO (FFACO, 1996).

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6.0 REFERENCES

DOE/NV, see U.S. Department of Energy, Nevada Operations Office.

EPA, see U.S. Environmental Protection Agency.

Federal Facility Agreement and Consent Order. 1996 (as amended). Agreed to by the state of Nevada, the U.S. Department of Energy, and the U.S. Department of Defense.

Federal Facility Agreement and Consent Order. 2003. Use Restriction Posting Guidance.

FFACO, see Federal Facility Agreement and Consent Order.

NNSA/NSO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office

NNSA/NV, see U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office

U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office. 2002. Nevada Environmental Restoration Project Industrial Sites Quality Assurance Project Plan, Nevada Test Site, Nevada. DOE/NV--372--REV 3. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office. 2004. Streamlined Approach for Environmental Restoration Plan for Corrective Action Unit 115: Area 25 Test Cell A Facility, Nevada Test Site, Nevada. DOE/NV--987-REV 1. Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office. 2004. NV/YMP Radiological Control Manual. DOE/NV/11718--079-REV 5. Las Vegas, Nevada.

U.S. Environmental Protection Agency. 1994. Guidance for the Data Quality Objectives Process, EPA QA/G-4. Washington D.C.

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APPENDIX A*

DATA QUALITY OBJECTIVES

* As presented and published in the approved Streamlined Approach for Environmental Restoration Plan for Corrective Action Unit 115: Area 25 Test Cell A Facility, Nevada Test Site, Nevada, 2004, DOE/NV--987-REV 1. Las Vegas, NV.

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APPENDIX A.1
DATA QUALITY OBJECTIVES

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APPENDIX A.1

DATA QUALITY OBJECTIVES FOR CORRECTIVE ACTION UNIT 115: AREA 25 TEST CELL A FACILITY

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
ALLW	Asbestiform Low-Level Waste
BN	Bechtel Nevada
CAS	Corrective Action Site
CAU	Corrective Action Unit
COC	Contaminants of concern
COPC	Contaminants of potential concern
CSM	Conceptual Site Model
D&D	Deactivation and Decommissioning
DOE	U.S. Department of Energy
DOE/NV	U.S. Department of Energy, Nevada Operations Office
DQO	Data Quality Objective(s)
EPA	U.S. Environmental Protection Agency
FFACO	Federal Facility Agreement and Consent Order
ft	foot (feet)
ft^2	square feet
ft^3	cubic feet
FY	fiscal year
gal	gallons
HVAC	heating, ventilation, and air conditioning
l	liter
m	meter(s)
m^2	square meters
m^3	cubic meters
NDEP	Nevada Division of Environmental Protection
NNSA/NSO	U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office
NTS	Nevada Test Site
PCB	polychlorinated biphenyls
QA/QC	Quality Assurance/Quality Control
SAFER	Streamlined Approach for Environmental Restoration

ACRONYMS AND ABBREVIATIONS (continued)

TCA	Test Cell A
TCLP	Toxicity Characterization Leaching Procedure
XRF	X-Ray Fluorescence

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APPENDIX A.1
DATA QUALITY OBJECTIVES FOR CORRECTIVE ACTION UNIT 115: AREA 25 TEST CELL A FACILITY, NEVADA TEST SITE, NEVADA

PRESENTATION OF KNOWN DATA RELATED TO CORRECTIVE ACTION UNIT 115

The information presented in this worksheet is based on historical data generated from preliminary assessment activities for Corrective Action Unit (CAU) 115: Test Cell A (TCA) Facility at the Nevada Test Site (NTS). The Data Quality Objective (DQO) worksheet follows the U.S. Environmental Protection Agency (EPA) DQO guidance outline (EPA, 2000b). The steps systematically build on the data acquired during preliminary assessment work and background research. Copies of the preliminary assessment work are retained in the CAU 115 project files.

Members of the Planning Team (* indicates members present at the DQO meeting):

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1.0 STATE THE PROBLEM (STEP 1)

Concisely describe the problem to be studied. Review prior studies and existing information to gain a sufficient understanding to define the problem.

The general location, nature, and extent of the CAU 115 corrective action sites (CASs) are understood; however, additional information is needed to verify that the existing information is adequate, confirm the existence of contamination and/or waste, and/or verify previously completed cleanup activities. Information will be used to close these CASs under the Streamlined Approach to Environmental Restoration (SAFER) process.

1.1 CAS SPECIFIC INFORMATION

CAU 115 is located on F Road in Area 25 of the NTS, approximately 87 miles north of Las Vegas, Nevada. It is comprised of four CASs:

- CAS 25-41-04, TCA Facility (Including Buildings 3113, 3113A, and 3113B)
- CAS 25-99-04 Asbestos Wrapped Piping (Exterior)
- CAS 25-99-05 Asbestos Wrapped Piping (Interior)
- CAS 25-99-06 Asbestos Wrapped Piping (Roof)

The following sections describe the CASs in CAU 115 and the conceptual site models (CSMs) that apply to each CAS.

1.1.1 CAS 25-41-04, Test Cell A Facility

CAU 115, TCA Facility, includes Buildings 3130, 3130-A, and 3130-B. Buildings 3113, 3113A, and 3113B are constructed of steel-reinforced concrete. Total floor space of all three buildings is estimated to be 355 square meters (m^2) (3,821 square feet [ft^2]). Building 3113 was constructed in 1958 and consists of two floors totaling 146 m^2 (1,573 ft^2). The first floor has approximately 111 m^2 (1,200 ft^2) and consists of an instrument room, equipment room, and the N-3 and N-4 rooms. The second floor consists of the Penthouse and Neutronics room. Building 3113A was constructed in 1961 and is approximately 139 m^2 (1,500 ft^2). This structure consists of the Flow Control Room. Building 3113B contains approximately 69 m^2 (748 ft^2) and consists of restrooms and a computer storage room. Building 3130 is constructed of steel I-beams and corrugated metal panels. The TCA Facility was used to conduct the initial tests of nuclear rockets developed under Project Rover in Area 25 of the NTS. The NTS is located approximately 62 miles north of Las Vegas, Nevada.

The Preliminary Assessment (IT/LV, 1999) detailed the historical operations. From 1959 to 1966, the Kiwi, Nerva, and Phoebus reactors were tested at the TCA Facility. The reactors operated by fission of highly enriched Uranium-235 (U-235). The energy created by the fission of U-235 was absorbed by pumping hydrogen gas through the reactor where it was heated to 4,000 degrees Fahrenheit. The heated hydrogen was then exhausted through a nozzle at very

high velocities to produce thrust. After exiting the nozzle, the hydrogen gas was ignited, producing water vapor. The reactors were mounted on railcars and fired upward. Test runs ranged from several seconds to about one hour.

Testing resulted in the facility being contaminated with fission products and fuel particles. Most of the contamination consisted of isotopes with relatively short half-lives, and has since decayed away. The remaining isotopes of primary concern include Cobalt-60 (Co-60), Cesium-137 (Cs-137), and Strontium-90 (Sr-90). Additional isotopes that may be present in lesser abundance include Uranium-234 (U-234), -235 (U-235), -236 (U-236), -238 (U-238), and Plutonium-239 (Pu-239) and Plutonium-240 (Pu-240).

The TCA Facility was deactivated in 1966 and placed into long-term mothball status in 1973. The facility, excluding the roof, was successfully decontaminated in 1978 (International Technologies Las Vegas [ITLV], 1999). Since January 1999, the TCA Facility has been maintained under the NTS Deactivation and Decommissioning (D&D) Surveillance & Maintenance program.

The TCA facility contains the following known hazardous materials: lead, mercury, and asbestos containing materials (ACM) which are discussed further in the following sections. Suspected ACM building materials were sampled in November 2003 (Appendix A.4). Approximately 1,200 linear feet of ACM-insulated piping and an unspecified volume of ACM in the form of mastic sealant were identified within the TCA Facility.

1.1.2 CAS 25-99-04, Asbestos Wrapped Piping (Exterior)

This CAS includes asbestos-wrapped piping located outside of the facility below the roofline. Specific small diameter piping sections covered with asbestos-containing insulation materials have been identified. These pipes and selected electrical cables are covered with silver-colored metallic foil. Previous analysis showed the foil to contain lead at a concentration of 1,000 mg/kg (ITLV, 1999), however, the X-Ray Fluorescence (XRF) field screening did not confirm these results. Samples of the silver-colored metallic foil covering the ACM insulation were collected and analyzed for toxicity characterization leading procedure (TCLP) lead.

1.1.3 CAS 25-99-05, Asbestos Wrapped Piping (Interior)

This CAS addresses a section of ducting in Building 3113A. The ducting is wrapped with asbestos-containing insulation materials and is not radiologically impacted.

1.1.4 CAS 25-99-06, Asbestos Wrapped Piping (Roof)

The mastic roofing sealant is located around roof penetrations on Buildings 3130 and 3130-A. This material was previously analyzed and determined to contain non-friable ACM at greater than one percent. The material was surveyed and confirmed to be radiologically impacted. The roofing material will be removed by qualified Asbestos Workers and containerized in 208-liter (*l*) (55-gallon [gal]) steel drums. The waste will be managed as non-radiological Asbestiform Low-Level Waste (ALLW), as specified in Section 5.2.2, "Asbestiform Low-Level Waste."

1.2 DEVELOP/REFINE THE CONCEPTUAL MODEL

The available information from which the conceptual model is based was derived from site process knowledge, historical background information, site analysis, and personnel interviews regarding historical activities related to the CASs. The conceptual side model is presented below.

1.2.1 Test Cell A Deactivation and Decommissioning Conceptual Site Model

1.2.1.1 Radioactive Contamination

The types and quantities of radiological contamination generated by the tests conducted at CAU 115 are well documented. Considerable amounts of information on the operation of the facility are presented in published literature and historical records. Available information includes the types of reactors, type of fuel used, power levels, run times, effluent, and results of past decontamination efforts. In addition, interviews with past workers were conducted to provide information on how facility operations were conducted and the known contaminants of concern (COC) produced during testing. Radiological contamination information is documented in the process knowledge of the facility.

Radiologically impacted areas of the facility are limited to the reactor pad, Building 3130, the shielding wall of Building 3113, the concrete pad and cryogenic gas transfer pipes on the south side of 3113A, the roofs of Buildings 3113 and 3113A, and the floor drain in Room 1.

Limited sections of piping and electrical conduit are embedded within the concrete walls and floors of the structure. Surveys indicate that these areas are slightly radiologically impacted (Appendix A.3). Heating, ventilation, and air conditioning (HVAC) systems are also present in portions of the facility. Preliminary surveys of a limited portion of the HVAC systems did not detect any radiological contamination (radiological contamination in the remaining areas was sporadic and of low activities).

Subsurface radiological soil contamination exists surrounding the facility. However, soil remediation is not included in the scope for CAU 115. Analytical results from three surface soil samples collected in October 2003 did not indicate any significant contamination.

1.2.1.2 Chemical Contamination

1.2.1.2.1 Polychlorinated Biphenyls

Analytical results confirm that polychlorinated biphenyls (PCBs) are present in fluorescent light ballasts and in the paint covering the walls and floors of Buildings 3113 and 3113A. The PCB concentrations range from 17 to 1,600 milligrams per kilogram (mg/kg). The TCLP lechate analysis was completed on two samples of paint. Results confirm that the PCB paint did not leach above regulatory guidelines. In its current state, the PCB paint does not pose a threat to human health or the environment. Applied dried paints, classified as PCB Bulk Product Waste

under Title 40 Code of Federal Regulations (CFR) 761.50 (b) 7 (EPA, 1996d), will be disposed of in a on-site disposal facility as demolition debris without treatment.

Analytical results confirm that PCBs are not present in the lubricating fluids known to be present at the TCA Facility and the main transformer that provided power to the facility was inspected and determined not to contain PCB oil.

1.2.1.2.1 Lead

Hazardous materials present at the TCA Facility are limited to solid lead. Lead is present in shielding doors, as lead bricks, and as lead plate. Field screening results using an XRF instrument confirm that lead is not present in the paint.

The Preliminary Assessment reported that lead alloy foil is present around the ACM insulation that covers the majority of piping and electrical cable at the facility. However, field screening using an XRF instrument did not confirm these observations.

Solid lead was confirmed by visual observation. Lead is present as plate, bricks, and wool. Radiological surveys confirm that the majority of lead is not radiologically impacted. Lead bricks in the wall on as shielding in the reactor wall penetrations are shown in Figure 10.

1.2.1.2.3 Asbestos Containing Materials

The presence of ACM was confirmed by laboratory analysis. Non-friable ACM is present in the mastic roofing sealant located around roof penetrations on Buildings 3113 and 3113A. Friable ACM is present as pipe and HVAC duct insulation and around electrical cable. These areas of asbestos have been identified by CAS below and are identified by CAS:

- CAS 25-99-04 Asbestos wrapped pipes (exterior)
- CAS 25-99-05 Asbestos wrapped pipes (interior)
- CAS 25-99-06 Asbestos wrapped pipes (roof)

Suspected ACM building materials were sampled in November 2003 (Appendix A.4). Approximately 1,200 linear feet of ACM-insulated piping and an unspecified volume of ACM in the form of mastic sealant were identified within the TCA Facility.

Most of the ACM insulated pipe and electrical cables are covered with silver-colored metallic foil. Previous analysis showed the foil to contain lead at a concentration of 1,000 mg/kg (ITLV, 1999). However, XRF field screening did not confirm these results. Samples of the silver foil covering the ACM insulation were collected and analyzed for TCLP lead.

The mastic roofing sealant is located around roof penetrations on Buildings 3130 and 3130-A. This material was previously analyzed and determined to contain non-friable ACM at greater than 1 percent. The material was surveyed and confirmed to be radiologically impacted. The

roofing material will be removed by qualified Asbestos Workers and will be containerized in 208-L (55-gal) steel drums. The waste will be managed as non-radiological ALLW, as specified in Section 5.2.2, "Asbestiform Low-Level Waste."

1.2.1.2.4 Mercury

Mercury is only present in fluorescent light bulbs. No other mercury-containing items have been observed in the TCA Facility. All fluorescent light bulbs will be removed prior to demolition and managed appropriately. Possible mercury containing items and instrumentation will be identified for sampling. A representative item will be removed and analyzed for mercury and other hazardous constituents.

1.3 SECONDARY CONCEPTUAL SITE MODELS FOR CORRECTIVE ACTION UNIT 115

Based on the extensive available historical information and process knowledge, confirmed by site inspections and walkdowns, the initial CSM is substantiated and additional CSMs are not needed.

1.4 POTENTIAL HOLD POINTS

During closure activities, certain conditions affecting the project schedule and budget may require decisions prior to continuing work. Primary hold/decision points that may occur during the CAU 115 SAFER process have been identified and include the review of data for the selection of potential site locations for further investigation and the review of analytical data.

During closure activities, certain conditions affecting the project schedule and budget may require decisions to be made prior to continuing work. If at any time during the course of closure activities a hold point is reached, the NNSA will obtain consensus with the NDEP prior to beginning the next phase of closure activities.

The D&D Project Team will anticipate and minimize the necessary hold points. By establishing specific alternative actions, disruptions to the project schedule will be minimized. Primary hold/decision points that may occur during the CAU 115 SAFER process have been identified and include the review of data for the selection of potential site locations for further investigation and the review of analytical data.

Specific potential hold points include the following:

- Mitigation of safety hazards
- Verification of removal of hazardous materials
- Decontamination of reactor concrete pad and impacted concrete surfaces.
- Demolition and disposal of Buildings 3113, 3113A, 3113B, and 3130
- Final radiologically survey to free-release remaining concrete slab.

In addition to the previously discussed hold/decision points, work may be temporarily suspended until the issue can be satisfactorily resolved if any of the following unexpected conditions occur:

- Conditions outside the scope of work are encountered
- Radiological screening yields results which require an upgrade in procedures to continue survey work in specific areas
- Elevated levels of additional COPCs are found that were not originally identified as being present at the sites
- Unexpected conditions including waste and/or contamination are encountered
- Out-of-scope work activities are required due to the detection of other COC that would require re-evaluating a disposal pathway, such as with hazardous or low level waste
- Unsafe conditions or work practices posing a threat to personnel, equipment, or the environment, not originally documented in the Site Specific Health and Safety Plan, are encountered

Other technical factors are encountered that require the preparation of a Record of Technical Change to the approved SAFER Plan.

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2.0 IDENTIFY THE DECISION (STEP 2)

Identify what questions the study will attempt to resolve and what actions may result.

2.1 DEVELOP DECISION STATEMENTS

A SAFER Plan will be prepared based on the currently available process knowledge, historical information, geophysical data, and radiological survey data. Sites where the general location and nature of debris/contamination are known include the following CASs:

- CAS 25-41-04, TCA Facility (including Buildings 3113, 3113A, and 3113B)
- CAS 25-99-04 Asbestos Wrapped Piping (Exterior)
- CAS 25-99-05 Asbestos Wrapped Piping (Interior)
- CAS 25-99-06 Asbestos Wrapped Piping (Roof)

CASs with chemical (hazardous) or radiologically impacted materials will be clean closed by decontamination or removal of the impacted material. Clean closure will be verified by conducting a radiological survey on the remaining concrete pad to confirm all radioactive and chemical contamination has been removed.

2.2 DECISION STATEMENTS

Decision I: Is waste present and/or is contamination present above action levels within a CAS? A contaminant of potential concern (COPC) that is detected at a concentration exceeding action levels will be considered a COC. A COC is defined as a site-related constituent that exceeds the screening criteria or is detected during surface radiological surveys.

Decision II: If waste is present and/or contamination is present above action levels or screening levels, has the lateral and vertical extent been determined, and is it technically feasible to remove the waste/contamination? (If technically feasible, all CASs containing waste/contamination will be clean closed.) Hazardous materials will be removed and preliminary radiological surveys will determine the location and extent of contamination.

2.3 ALTERNATIVE ACTIONS TO THE DECISION

If a COPC is not present, further assessment of that COPC in the CAS is not required. If a COC is present, resolve Decision II. The alternative for Decision II is: "If the extent and migration of a COC is defined in both the lateral and vertical directions, further assessment of the CAS is not required. If the extent of a COC is not defined, reevaluate site conditions and collect additional samples."

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3.0 IDENTIFY THE INPUTS TO THE DECISION (STEP 3)

Identify the information that needs to be obtained and the measurements that need to be taken to resolve the decision statement. This step identifies the information needed and sources of information, the basis for establishing action levels, and sampling and analysis methods that can meet the data requirements.

3.1 IDENTIFY THE INFORMATION INPUTS NEEDED AND RESOLVE THE DECISION

In order to confirm the site CSM and to determine the nature and extent of contamination, data must be collected and analyzed following the following three criteria: 1) Survey data must be collected in areas containing impacted debris and/or contamination; 2) Samples will be collected from areas or items suspect to containing one of the identified COCs; and 3) The data must be adequate to detect COC.

Additional asbestos sampling will be performed prior to asbestos abatement activities beginning. Samples will be taken of electrical panels and components to identify if hazardous components exist. Verification samples will be taken as appropriate combined with final radiological surveys of the concrete pad.

In order to determine if a COC (e.g., radionuclides, asbestos, lead, PCBs, and mercury) is present at a particular CAS, sample data must be collected and analyzed by two criteria: 1) Samples must be collected in areas most likely to be contaminated; and 2) The requested analyses must be sufficient to detect any contamination present within the samples. Areas and specific items (i.e., piping, equipment, insulation, and penetrations) have been previously identified and sampled for their COC.

In order to confirm the extent of contamination, data must be collected and analyzed using a data collection method adequate to detect the COC. Samples will be collected based on radiological and geophysical surveys, field observations, and field screening results. Samples will be collected from areas expected not to be impacted by the COC so that the impacted area can be bounded and defined.

Biasing factors to support the determination of the nature and extent criteria include the following:

- Radiological surveys
- Geophysical surveys
- Documented process knowledge on source and location of release
- Field observations
- Experience and data from investigations of similar sites
- Professional judgment

- Field screening results

3.1.1 Quantitative Data

Quantitative data measures the quantity or amount of a characteristic or component within the population of interest. These data require the highest level of quality assurance/quality control (QA/QC) in collection and measurement systems because the intended use of the data is to resolve primary decisions, and/or to verify that closure standards have been met. Laboratory analytical data are generally considered quantitative.

3.1.2 Semi-Quantitative Data

Semi-quantitative data indirectly measure the quantity or amount of a characteristic or component. Inferences are drawn about the quantity or amount of a characteristic or component because a correlation has been shown to exist between the indirect measurement and the results from a quantitative measurement. The QA/QC requirements on semiquantitative collection and measurement systems are high but may not be as rigorous as a quantitative measurement system. Semiquantitative data contribute to decision making but are not sued alone to resolve primary decisions. Field-screening data are generally considered semiquantitative. The data are often used to guide investigations toward quantitative data collection.

3.1.3 Qualitative Data

Qualitative data identify or describe the characteristics or components of the population of interest. The QA/QC requirements are the least rigorous on data collection methods and measurement systems. The intended use of the data is for information purposes, to refine conceptual models, and to guide investigations rather than resolve primary decisions. This measurement of quality is typically assigned to historical information and data where QA/QC may be highly variable or not known. Professional judgment is often used to generate qualitative data.

3.1.4 Hold Points

Hold points will be designed into the investigation and closure activities for CAU 115. Hold points are designed to allow decision makers to review the existing data and decide which of the available options are most suitable. Hold points include the review of geophysical and radiological data and field observations for selection of targets for investigation, selection of corrective actions. The major hold points for this project have been identified and are discussed in Section 1.4.

3.2 List Types of Contaminants of Potential Concern and Affected Media

The following COCs have been identified as being associated with CAU 115:

- Lead

- PCBs
- Asbestos
- Mercury
- Radionuclides

A list of identified COCs can be found in Table 1.

TABLE 1. CORRECTIVE ACTION UNIT 115 WASTE AND CONTAMINANTS OF CONCERN DESCRIPTION

CAS	CAS DESCRIPTION	CONTAMINANTS OF CONCERN					IMPACTED / NON-IMPACTED DEMOLITION DEBRIS	CONTAMINANT/ WASTE DESCRIPTION
		ACM	LEAD	PCBS	MERCURY	RAD		
25-41-04	Test Cell A Facility	Yes	Yes	Yes	Yes	Yes	Unknown	The facility contains asbestos wrapped ducting, leads bricks and batteries, lead wool, possible PCB-containing lubricants, ballasts, mercury vapor bulbs and switches, radiologically impacted concrete.
25-99-04	Asbestos Wrapped Piping (Exterior)	Yes	No	No	No	No	N/A	Small diameter piping wrapped with asbestos insulation.
25-99-05	Asbestos Wrapped Piping (Interior)	Yes	No	No	No	No	N/A	Small diameter piping wrapped with asbestos insulation.
25-99-06	Asbestos Wrapped Piping (Roof)	Yes	No	No	No	No	N/A	Small diameter piping wrapped with asbestos insulation.

3.3 IDENTIFY POTENTIAL SAMPLING APPROACHES AND APPROPRIATE ANALYTICAL METHODS

The sampling techniques and analytical methods identified below will be used to resolve the decision rules and confirm the nature and extent of contamination at each CAS.

3.3.1 Radiological Surveys

Radiological surveys will be used to determine the presence and lateral extent of radiological contamination. Preliminary surveys will determine the locations and extent of contamination on the reactor concrete pad. This information will be used to determine the appropriate equipment and controls to be used during decontamination.

3.3.2 Radiological Field Screening

Based on site conditions and available data, field-screening activities may be conducted for alpha and beta/gamma radiation. A handheld radiological survey instrument or method may be used, based on the possibility that radiologically contaminated soil/debris may be present. If determined appropriate, on-site gamma spectrometry may also be used to screen samples.

Field screening techniques may be used during the Decision I and II sampling activities. These field-screening techniques will provide semiquantitative data that can be used to guide potential confirmatory sampling and waste management activities.

4.0 DEFINE THE STUDY BOUNDARIES (STEP 4)

Specify the time periods and spatial area to which decisions will apply. Determine when and where data should be collected. The purpose of this step is to define the target population of interest, specify the spatial and temporal features of that population that are pertinent for decision making, determine practical constraints on data collection, and define the scale of decision making relevant to target populations for Decision I and Decision II.

4.1 DEFINE THE GEOGRAPHIC AREAS OF THE FIELD INVESTIGATION

4.1.1 Define the Geographic Area Within Which all Decisions Must Apply

The CAU 115 limits are defined in the SAFER plan. The boundaries of the CAU and extent of the scope of work are outlined in this document.

4.1.2 Specify the Characteristics that Define the Population of Interest

The population of interest is the entire interior, exterior, and roof of the TCA Facility, including the concrete pad and moveable shed.

4.2 DEFINE THE TIME FRAME OF THE DECISION

4.2.1 Determine the Time Frame to Which the Study Data Apply

The study data should be relevant to the length of time allowed for by the SAFER process under the Federal Facility Agreement and Consent Order (FFACO) agreement. The decisions will be based on the documentation and data collection activities planned for 2004 and combined with the planned surveys to determine the proper recommendations for each of the CASs.

4.2.2 Determine When to Collect Data

Data collection activities are scheduled to begin in the fourth quarter of fiscal year (FY) 2004 and closure activities will be completed after approval of the final SAFER Plan. Data will be collected at times that meet the personnel and equipment availability constraints of the NTS, and at times when weather conditions that allow adequate site access and safe working conditions. A tentative schedule of activities for the completion of CAU 115 is presented in the SAFER Plan.

Radiological screening will be used to detect radiation above free-release criteria before any debris is removed off-site. There will be no other data collection, unless staining or other evidence of the presence of COPC or potential environmental impact is visibly detected and is determined to be related to CAU 115.

4.2.3 Define Relevant Time Constraints

- The final SAFER Plan is due to the NNSA/NSO by September 19, 2004.
- The FFACO deadline for the SAFER Plan is September 30, 2004.
- Fieldwork is tentatively scheduled to begin during the first quarter of FY2005.

4.3 IDENTIFY ANY PRACTICAL CONSTRAINTS ON DATA COLLECTION

1. Approval of the SAFER Plan and the DQO process by the NDEP
2. Equipment access and mobility at the NTS
3. Meteorological events that may impact fieldwork activities
4. Health and safety of workers
5. Operational/Security issues at the NTS
6. Unforeseen conditions including unsafe working conditions or other factors

5.0 DEVELOP A DECISION RULE (STEP 5)

Define the parameter of interest, specify the action level, and integrate the previous DQO inputs into a single statement that describes the logical basis for choosing among alternative actions. This step integrates outputs from the previous steps, with the inputs developed in this step into a decision rule ("If..., then...") statement. This decision rule describes the conditions under which possible alternative actions would be chosen.

5.1 DECISION RULE

Decision I: If waste is present and/or contamination is present above action levels, then the horizontal and vertical extent will be determined.

Decision II: If waste or contamination is present above action levels, and it is technically feasible to clean close the site, then the site will be clean closed.

If contamination is inconsistent with the CSM or extends beyond the identified CAS boundaries, work will be suspended and the investigation strategy will be reevaluated. If contamination is consistent with the CSM and is within CAS boundaries, the decision will be to define its extent.

5.2 SPECIFY THE ACTION LEVEL OR PRELIMINARY ACTION LEVEL FOR THE DECISION

Sufficient process knowledge and site surveys exist to support the CSMs. Asbestos, PCBs, lead, mercury, and radionuclides are the COCs within CAU 115.

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6.0 SPECIFY TOLERABLE LIMITS ON DECISION ERRORS (STEP 6)

Define the decision makers' tolerable decision error rates based on a consideration of the consequences of making an incorrect decision.

6.1 DECISION ERRORS

If present, radiological contamination will be detected by radiological survey instrumentation, decontaminated, and removed to free release criteria as specified in DOE Order 5400.5. If radiological contamination is not present, then the remaining concrete foundation is already below free release criteria; therefore, decision error limits are not applicable.

6.2 CONTAMINANTS OF POTENTIAL CONCERN MODELS

Models have been developed to characterize the COPCs for CASs within CAU 115. The models contain assumptions and statistical methodologies as appropriate to achieve the investigation/closure objectives. Table 1 summarizes the COPCs expected at CAU 115.

6.3 CONFIRMATION OF CORRECTIVE ACTIONS

The CAU 115 will be clean closed by removal of all hazardous materials, decontamination of radiologically impacted surfaces, and demolition of the structure(s). A confirmation radiological survey will be performed on the remaining concrete slab to determine that the remaining slab meets free release criteria as specified in DOE Order 5400.5, which is consistent with the Table 2 of the *Yucca Mountain Project/NTS RadCon Manual.* No soil excavation or removal will be performed as part of this closure activity.

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7.0 OPTIMIZE THE DESIGN (STEP 7)

Evaluate information from the previous steps and generate alternative data collection designs. Choose the most resource-effective design that meets all DQOs. This section presents an overview of the resource-effective strategy planned to obtain the data required to meet the project DQOs developed in previous steps. As additional data or information is obtained, this step will be reevaluated and refined, if necessary to reduce uncertainty and increase the confidence that the SAFER Corrective Action Investigation has met its intended goals.

7.1 CLOSURE STRATEGY

The COCs will be addressed by the execution of the following closure strategy:

- Mitigate safety hazards
  - o Install portable lighting
  - o Hantavirus cleanup
  - o Site setup

- Removal of hazardous materials
  - o ACMs
  - o Lead (bricks, wool, etc.)
  - o Electrical components containing hazardous materials
  - o Radiologically impacted materials
  - o PCB containing liquids (if present)

- Characterization and decontamination of reactor concrete pad and impacted concrete surfaces

- Demolition and disposal of Buildings 3113, 3113A, 3113B, and 3130 (Including exterior piping and exhaust stack). Dewar not included in the scope of this project.

- Final radiologically survey to free-release remaining concrete slab.

The attached "CAU 115 DQO Presentation" (Attachment A), which was presented to NNSA/NVO and the State of Nevada, summarizes this DQO document.

7.2 CLOSURE DECISION PROCESS

Hold/decision points have been included in the process to allow critical data to be reviewed by the parties prior to proceeding with the closure activities. The three main hold points have been identified in the SAFER Plan. Only CASs determined to be associated with CAU 115 will be addressed within the corrective actions described in these DQOs.

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8.0 REFERENCES

EPA, see U.S. Environmental Protection Agency.

NDEP, see Nevada Division of Environmental Protection.

NNSA/NSO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office

U.S. Environmental Protection Agency. 2000a. Guidance for Choosing a Sampling Design for Environmental Data Collection (EPA QA/G-5), Office of Environmental Information, Washington, D.C.

U.S. Environmental Protection Agency. 2000b. Guidance for the Data Quality Objective Process, EPA QA/G-4, Washington, D.C.

U.S. Environmental Protection Agency. 2002. Region IX Preliminary Remediation Goals (PRGs), San Francisco, CA.

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APPENDIX B

SAMPLE ANALYTICAL RESULTS

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NTS - PRODUCTION CHAIN OF CUSTODY RECORD: 0411/FOIL/L

Job Number: 23220
Facility ID: NTS
Sampling Event: 0411/ER/CAU 115 TEST CELL A
COC Number: 0411/FOIL/L
Laboratory: RECRA

Cooler ID: SDG #: V2381
Cooler Temp:
Number of Coolers:
Cooler Units:
Logbook No.: BN ER Log Book

Delivery Order ID:
SEIR No.: 0411/ER/CAU 115 SILVER FOIL-0
Charge Code: 5B12CZ33

Sampled By: BADRI N. KAPOOR (Print) Badri N. Kapoor (Sign) Teresa Morgan (Print) Teresa Morgan (Sign)

Requested Analysis:

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	StartTime	Collection End Date	End Time
25	CAU 115 TEST CELL "A" FOIL	CAU1150501	GRAB	SOL	12-16-04	0945	12-16-04	10.00

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
9.23	TCLP Metals		NORM	U	~~1~~ 2	D	NA (TAT 7 days)

7 BNK 12/16

Site ID	Station ID	Sample ID	Samp Type	Matrix Code	Collection Start Date	StartTime	Collection End Date	End Time
25	CAU 115 TEST CELL "A" FOIL	CAU1150502	GRAB	SOL	12-16-04	1005	12-16-04	10:25

Pay Item	Description	Parameter Code	Anal Cd	Filt Cd	Prior Lvl	Anal Lvl	Comments
9.23	TCLP Metals		NORM	U	~~1~~ 2	D	NA (TAT 7 days)

7 BNK 12/16

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s., UN2910.

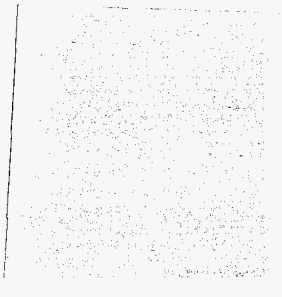
Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 12/28/04

CLIENT: BECHTEL NEVADA V2381 LVL LOT #: 0412L489

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-003	CAU115050101	Silver, TCLP Leachate	6.0	u	UG/L	6.0	6.0
		Arsenic, TCLP Leachate	15.6	u	UG/L	15.6	6.0
		Barium, TCLP Leachate	153		UG/L	2.4	6.0
		Cadmium, TCLP Leachate	180		UG/L	1.8	6.0
		Chromium, TCLP Leachate	6.2		UG/L	4.8	6.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Lead, TCLP Leachate	783		UG/L	13.2	6.0
		Selenium, TCLP Leachate	22.2	u	UG/L	22.2	6.0
-004	CAU115050201	Silver, TCLP Leachate	6.0	u	UG/L	6.0	6.0
		Arsenic, TCLP Leachate	15.6	u	UG/L	15.6	6.0
		Barium, TCLP Leachate	217		UG/L	2.4	6.0
		Cadmium, TCLP Leachate	9370		UG/L	1.8	6.0
		Chromium, TCLP Leachate	11.0		UG/L	4.8	6.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Lead, TCLP Leachate	528		UG/L	13.2	6.0
		Selenium, TCLP Leachate	22.2	u	UG/L	22.2	6.0



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INORGANICS METHOD BLANK DATA SUMMARY PAGE 12/28/04

CLIENT: BECHTEL NEVADA V2381 LVL LOT #: 0412L489

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	04L0772-MB1	Silver, TCLP Leachate	1.0	u	UG/L	1.0	1.0
		Arsenic, TCLP Leachate	2.6	u	UG/L	2.6	1.0
		Barium, TCLP Leachate	2.2		UG/L	0.40	1.0
		Cadmium, TCLP Leachate	0.30	u	UG/L	0.30	1.0
		Chromium, TCLP Leachate	1.9		UG/L	0.80	1.0
		Lead, TCLP Leachate	2.2	u	UG/L	2.2	1.0
		Selenium, TCLP Leachate	3.7	u	UG/L	3.7	1.0
BLANK2	04L0772-MB2	Silver, TCLP Leachate	6.0	u	UG/L	6.0	6.0
		Arsenic, TCLP Leachate	15.6	u	UG/L	15.6	6.0
		Barium, TCLP Leachate	7.1		UG/L	2.4	6.0
		Cadmium, TCLP Leachate	1.8	u	UG/L	1.8	6.0
		Chromium, TCLP Leachate	4.8	u	UG/L	4.8	6.0
		Lead, TCLP Leachate	13.2	u	UG/L	13.2	6.0
		Selenium, TCLP Leachate	22.2	u	UG/L	22.2	6.0
BLANK1	04C0282-MB1	Mercury, Total	0.10	u	UG/L	0.10	1.0
BLANK2	04C0282-MB2	Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
BLANK3	04C0282-MB3	Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 12/28/04

CLIENT: BECHTEL NEVADA V2381 LVL LOT #: 0412L489

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-003	CAU115050101	Silver, TCLP Leachate	4250	6.0 u	5000	85.0	6.0
		Arsenic, TCLP Leachate	4200	15.6 u	5000	84.0	6.0
		Barium, TCLP Leachate	80800	153	100000	80.6	6.0
		Cadmium, TCLP Leachate	1010	180	1000	83.3	6.0
		Chromium, TCLP Leachat	4230	6.2	5000	84.5	6.0
		Mercury, TCLP Leachate	179	0.10u	200	89.5	100
		Lead, TCLP Leachate	4990	783	5000	84.1	6.0
		Selenium, TCLP Leachat	860	22.2 u	1000	86.0	6.0

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 12/28/04

CLIENT: BECHTEL NEVADA V2381 LVL LOT #: 0412L489

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	04L0772-LC1	Silver, LCS	474	500	UG/L	94.8
		Arsenic, LCS	8980	10000	UG/L	89.8
		Barium, LCS	4970	5000	UG/L	99.4
		Cadmium, LCS	232	250	UG/L	92.9
		Chromium, LCS	484	500	UG/L	96.9
		Lead, LCS	2350	2500	UG/L	93.9
		Selenium, LCS	8510	10000	UG/L	85.1
LCS1	04C0282-LC1	Mercury, LCS	5.0	5.0	UG/L	100.1

CHAIN OF CUSTODY RECORD

Environmental Technical Services

V2428

SDG #: ~~V2428~~ V2428 Corr

Chain of Custody No:	0502/HYD FLD/L	**Laboratory:**	RECRA
Sampling Event:	0411/ER/CAU 115 TEST CELL A	**BN Record Owner:**	ER
SEIR ID:	0411/ER/CAU 115 OIL	**Charge Code:**	5B12 CZ50
Collected By:			

Requested Analysis:

Area	Station	Sample ID	Sample Matrix	Collection Date Time	Filtered	LEVELS Anal.	LEVELS Priority	Pay Item	Description	Comments
25	CAU 115 TEST CELL "A" HYD FLD	CAU1150503	LO	3/8/05 14:09	U	D	14	3.1	PCBs only	

Lionville Laboratory, Inc.

PCBs by GC

RFW Batch Number: 0503L971 Client: BECHTEL NEVADA V2428 Work Order: 60052001001 Page: 1

Report Date: 03/22/05 14:44

	Cust ID:	CAU1150503	CAU1150503	CAU1150503	PBLKHK	PBLKHK BS
Sample Information	RFW#:	003	003 MS	003 MSD	05LE0197-MB1	05LE0197-MB1
	Matrix:	OIL	OIL	OIL	SOIL	SOIL
	D.F.:	1.00	1.00	1.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	52 %	76 %	76 %	91 %	97 %
	Decachlorobiphenyl	54 %	103 %	98 %	87 %	92 %
Aroclor-1016		400 U	85 %	86 %	400 U	93 %
Aroclor-1221		400 U	400 U	400 U	400 U	400 U
Aroclor-1232		400 U	400 U	400 U	400 U	400 U
Aroclor-1242		400 U	400 U	400 U	400 U	400 U
Aroclor-1248		400 U	400 U	400 U	400 U	400 U
Aroclor-1254		400 U	400 U	400 U	400 U	400 U
Aroclor-1260		700	96 %	96 %	400 U	97 %

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Case No.: BECHTEL NEVADA V2428

RFW Lot No.: 0503L971

	CLIENT SAMPLE NO.	S1 ( )#	OTHER DCB
01	CAU1150503	52	54
02	CAU1150503MS	76	103
03	CAU1150503MSD	76	98
04	PBLKHKLE0197-MB1	91	87
05	PBLKHKLE0197-MB1 BS	97	92

ADVISORY QC LIMITS

S1 ( ) = Tetrachloro-m-xylene (28-118)

S2 (DCB) = Decachlorobiphenyl (38-122)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Case No.: BECHTEL NEVADA V2428 RFW Lot No.: 0503L971-003

MATRIX Spike - Sample No.: CAU1150503 Level:(low/med) LOW

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC
Aroclor-1016	5000	0	4270	85	60 -140
Aroclor-1260	5000	0	5500	96	60 -140

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Aroclor-1016	5000	4290	86	1	NA	60 -140
Aroclor-1260	5000	5500	96	0	NA	60 -140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Case No.: BECHTEL NEVADA V2428 RFW Lot No.: 0503L971

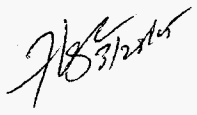
MATRIX Spike - Sample No.: PBLKHKLE0197-MB1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC
Aroclor-1016	5000	0	4640	93	60 -140
Aroclor-1260	5000	0	4850	97	60 -140

Column to be used to flag recovery value with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:



4D

METHOD BLANK SUMMARY

Lab Name: Lionville Labs, Inc. Contract: 60052-001-001-0001-00

Case No.: BECHTEL NEVADA V2428

Lab Sample ID: 05LE0197-MB1 Lab File ID: BLK08330.01

Matrix:(Soil/Water) SOIL Level:(low/med) LOW

Date Extracted: 03/17/05 Extraction:(SepF/Cont/Sonc) DIL

Date Analyzed (1): 03/19/05 Time Analyzed (1): ____

Instrument ID (1): 13 GC Column ID (1): RTX-CLP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1
01	CAU1150503	0503L971-003	03/19/05
02	CAU1150503MS	0503L971-003S	03/22/05
03	CAU1150503MSD	0503L971-003T	03/22/05
04	PBLKHKLE0197-MB1 BS	05LE0197-MB1S	03/19/05

COMMENTS:

3/28/05

FORM IV

CHAIN OF CUSTODY RECORD

Environmental Technical Services

SDG #: V2428

Chain of Custody No: 0502/WW/LION
Sampling Event: 0411/ER/CAU 115 TEST CELL A
SEIR ID: 0502/ER/CAU 115 WASTE WATER
Collected By: Kevin B. Campbell

Laboratory: RECRA
BN Record Owner: ER
Charge Code: 5B12 CZ50

Requested Analysis:

Area	Station	Sample ID	Sample Matrix	Collection Date Time	Filtered	LEVELS Anal.	LEVELS Priority	Pay Item	Description	Comments
25	CAU 115 TEST CELL "A" WW	CAU1150508	WW	3/8/05 1329	U	D	14	1.31	VOCS, TCLP LIST	
				3/8/05 1334	U	D	14	2.17	SVOCS, TCLP LIST	
				3/8/05 1340	U	D	14	4.26	RCRA 8 METALS	
				3/8/05 1343	U	D	14	5.40	HYDROGEN ION (PH)	
23 Bldg 652 Room 10		CAU1150508	WQ	3/8/05 11:10	U	P	14	1.31	VOCS, TCLP LIST	

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 03/28/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	CAU1150508	Silver, Total	0.50 u	UG/L	0.50	1.0
		Arsenic, Total	3.4	UG/L	2.9	1.0
		Barium, Total	210	UG/L	0.20	1.0
		Cadmium, Total	0.40 u	UG/L	0.40	1.0
		Chromium, Total	7.6	UG/L	0.40	1.0
		Mercury, Total	0.10 u	UG/L	0.10	1.0
		Lead, Total	1.9 u	UG/L	1.9	1.0
		Selenium, Total	4.0 u	UG/L	4.0	1.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 03/28/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	05L0152-MB1	Silver, Total	0.50 u	UG/L	0.50	1.0
		Arsenic, Total	2.9 u	UG/L	2.9	1.0
		Barium, Total	0.51	UG/L	0.20	1.0
		Cadmium, Total	0.40 u	UG/L	0.40	1.0
		Chromium, Total	0.40 u	UG/L	0.40	1.0
		Lead, Total	1.9 u	UG/L	1.9	1.0
		Selenium, Total	4.0 u	UG/L	4.0	1.0
BLANK1	05C0056-MB1	Mercury, Total	0.10 u	UG/L	0.10	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 03/28/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-001	CAU1150508	Silver, Total	48.8	0.50u	50.0	97.6	1.0
		Silver, Total MSD	48.6	0.50u	50.0	97.2	1.0
		Arsenic, Total	1910	3.4	2000	95.1	1.0
		Arsenic, Total MSD	1900	3.4	2000	94.7	1.0
		Barium, Total	2150	210	2000	97.1	1.0
		Barium, Total MSD	2130	210	2000	96.1	1.0
		Cadmium, Total	46.8	0.40u	50.0	93.6	1.0
		Cadmium, Total MSD	46.5	0.40u	50.0	93.0	1.0
		Chromium, Total	198	7.6	200	95.2	1.0
		Chromium, Total MSD	197	7.6	200	94.5	1.0
		Lead, Total	478	1.9 u	500	95.7	1.0
		Lead, Total MSD	480	1.9 u	500	96.1	1.0
		Selenium, Total	1880	4.0 u	2000	93.9	1.0
		Selenium, Total MSD	1880	4.0 u	2000	93.9	1.0

Lionville Laboratory, Inc.

INORGANICS DUPLICATE SPIKE REPORT 03/28/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-001	CAU1150508	Silver, Total	97.6	97.2	0.41
		Arsenic, Total	95.1	94.7	0.41
		Barium, Total	97.1	96.1	1.0
		Cadmium, Total	93.6	93.0	0.64
		Chromium, Total	95.2	94.5	0.74
		Lead, Total	95.7	96.1	0.40
		Selenium, Total	93.9	93.9	0.021

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 03/28/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-001REP	CAU1150508	Silver, Total	0.50u	0.50u	NC	1.0
		Arsenic, Total	3.4	2.9	15.9	1.0
		Barium, Total	210	209	0.19	1.0
		Cadmium, Total	0.40u	0.40u	NC	1.0
		Chromium, Total	7.6	8.6	12.3	1.0
		Lead, Total	1.9 u	1.9 u	NC	1.0
		Selenium, Total	4.0 u	4.0 u	NC	1.0

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 03/28/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	05L0152-LC1	Silver, LCS	497	500	UG/L	99.3
		Arsenic, LCS	9840	10000	UG/L	98.4
		Barium, LCS	4970	5000	UG/L	99.4
		Cadmium, LCS	248	250	UG/L	99.1
		Chromium, LCS	500	500	UG/L	99.9
		Lead, LCS	2520	2500	UG/L	100.8
		Selenium, LCS	10000	10000	UG/L	100.3
LCS1	05C0056-LC1	Mercury, LCS	5.2	5.0	UG/L	103.9

Lionville Laboratory, Inc.

Volatiles by GC/MS, TCLP Leachate

RFW Batch Number: **0503L971** Client: **BECHTEL NEVADA V2428** Work Order: 60052001001 Page: 1a

Report Date: 03/18/05 14:10

	Cust ID:	CAU1150508		CAU1150508		CAU1150509		VBLKLU		VBLKLU BS	
Sample Information	RFW#:	001		001 MS		002		05LVX037-MB1		05LVX037-MB1	
	Matrix:	WATER		WATER		WATER		WATER		WATER	
	D.F.:	1.00		1.00		1.00		1.00		1.00	
	Units:	MG/L		MG/L		MG/L		MG/L		MG/L	
Surrogate Recovery	Toluene-d8	97	%	98	%	99	%	93	%	99	%
	Bromofluorobenzene	101	%	102	%	98	%	92	%	102	%
	1,2-Dichloroethane-d4	101	%	108	%	102	%	90	%	103	%
Vinyl Chloride		0.010	U	92	%	0.010	U	0.010	U	92	%
1,1-Dichloroethene		0.005	U	98	%	0.005	U	0.005	U	100	%
Chloroform		0.005	U	102	%	0.040		0.005	U	98	%
1,2-Dichloroethane		0.005	U	109	%	0.005	U	0.005	U	104	%
2-Butanone		0.018		114	%	0.010	U	0.010	U	108	%
Carbon Tetrachloride		0.005	U	110	%	0.005	U	0.005	U	109	%
Trichloroethene		0.005	U	100	%	0.005	U	0.005	U	99	%
Benzene		0.005	U	103	%	0.005	U	0.005	U	99	%
Tetrachloroethene		0.005	U	98	%	0.005	U	0.005	U	102	%
Chlorobenzene		0.005	U	98	%	0.005	U	0.005	U	101	%

*= Outside of EPA CLP QC limits.

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Lab Code: Lionvi Case No.: _____ SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	CAU1150508	97	101	101		0
02	CAU1150508MS	98	102	108		0
03	CAU1150509	99	98	102		0
04	VBLKLU	93	92	90		0
05	VBLKLU BS	99	102	103		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(85-114)
S2 (BFB) = Bromofluorobenzene	(81-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(74-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Lab Code: Lionvi Case No.: _____ SAS No.: _____ SDG No.: _____

MATRIX Spike - EPA Sample No.: CAU1150508 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (MG/L)	SAMPLE CONCENTRATION (MG/L)	MS CONCENTRATION (MG/L)	MS % REC	#	QC LIMITS REC
Vinyl Chloride	0.0500	0	0.0462	92		50 -150
1,1-Dichloroethene	0.0500	0	0.0488	98		61 -145
Chloroform	0.0500	0	0.0510	102		50 -150
1,2-Dichloroethane	0.0500	0	0.0544	109		50 -150
2-Butanone	0.0500	0.0185	0.0757	114		50 -150
Carbon Tetrachloride	0.0500	0	0.0549	110		50 -150
Trichloroethene	0.0500	0	0.0502	100		71 -120
Benzene	0.0500	0	0.0513	103		76 -127
Tetrachloroethene	0.0500	0	0.0491	98		50 -150
Chlorobenzene	0.0500	0	0.0490	98		75 -130

Column to be used to flag recovery value with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Lab Code: Lionvi Case No.: _____ SAS No.: _____ SDG No.: _____

MATRIX Spike - EPA Sample No.: VBLKLU Level: (low/med) LOW

COMPOUND	SPIKE ADDED (MG/L)	SAMPLE CONCENTRATION (MG/L)	MS CONCENTRATION (MG/L)	MS % REC #	QC LIMITS REC
Vinyl Chloride	0.0500	0	0.0462	92	50 -150
1,1-Dichloroethene	0.0500	0	0.0499	100	61 -145
Chloroform	0.0500	0	0.0491	98	50 -150
1,2-Dichloroethane	0.0500	0	0.0518	104	50 -150
2-Butanone	0.0500	0	0.0542	108	50 -150
Carbon Tetrachloride	0.0500	0	0.0543	109	50 -150
Trichloroethene	0.0500	0	0.0493	99	71 -120
Benzene	0.0500	0	0.0494	99	76 -127
Tetrachloroethene	0.0500	0	0.0510	102	50 -150
Chlorobenzene	0.0500	0	0.0505	101	75 -130

Column to be used to flag recovery value with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Lionville Laboratory Inc. Contract: 60052-001-001-0001-00

Lab Code: LVLI Case No.: SAS No.: SDG No.: 03L971

Lab File ID: X031605 Lab Sample ID: 05LVX037-MB1

Date Analyzed: 03/16/5 Time Analyzed: 1046

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: 5970X

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLKLUBS	05LVX037-MB1S	X031607	1157
02	CAU1150508	0503L971-001	X031611	1415
03	CAU1150508MS	0503L971-001S	X031612	1447
04	CAU1150509	0503L971-002	X031613	1518
05				
06				
07				
08				
09				
10				
11				
12				
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29				
30				

COMMENTS: _____

	Cust ID:	**CAU1150508**		**CAU1150508**		**SBLKGK**		**SBLKGK BS**		**SBLKGK BSD**	
Sample Information	RFW#:	**001**		**001 DL**		**05LE0189-MB1**		**05LE0189-MB1**		**05LE0189-MB1**	
	Matrix:	WATER		WATER		WATER		WATER		WATER	
	D.F.:	1.00		25.0		1.00		1.00		1.00	
	Units:	mg/L		mg/L		mg/L		mg/L		mg/L	
Surrogate Recovery	Nitrobenzene-d5	57	%	66	%	79	%	85	%	77	%
	2-Fluorobiphenyl	64	%	64	%	75	%	78	%	71	%
	p-Terphenyl-d14	62	%	76	%	86	%	83	%	76	%
	Phenol-d5	61	%	55	%	73	%	73	%	75	%
	2-Fluorophenol	56	%	54	%	74	%	50	%	76	%
	2,4,6-Tribromophenol	71	%	63	%	78	%	46	%	76	%
Pyridine		0.010	U	0.26	U	0.010	U	72	%	55	%
1,4-Dichlorobenzene		0.010	U	0.26	U	0.010	U	72	%	68	%
2-Methylphenol		0.53	E	0.84	D	0.010	U	79	%	76	%
3- and/or 4-Methylphenol		0.002	J	0.26	U	0.010	U	76	%	74	%
Hexachloroethane		0.010	U	0.26	U	0.010	U	71	%	68	%
Nitrobenzene		0.010	U	0.26	U	0.010	U	78	%	74	%
Hexachlorobutadiene		0.010	U	0.26	U	0.010	U	68	%	64	%
2,4,6-Trichlorophenol		0.010	U	0.26	U	0.010	U	38	%	73	%
2,4,5-Trichlorophenol		0.026	U	0.64	U	0.025	U	40	%	75	%
2,4-Dinitrotoluene		0.010	U	0.26	U	0.010	U	80	%	70	%
Hexachlorobenzene		0.010	U	0.26	U	0.010	U	81	%	77	%
Pentachlorophenol		0.026	U	0.64	U	0.025	U	19	%	81	%

*= Outside of EPA CLP QC limits.

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Case No.: BECHTEL NEVADA V2428

RFW Lot No.: 0503L971

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	CAU1150508	57	64	62	61	56	71		0
02	CAU1150508DL	66	64	76	55	54	63		0
03	SBLKGKLE0189-MB1	79	75	86	73	74	78		0
04	SBLKGKLE0189-MB1 BS	85	78	83	73	50	46		0
05	SBLKGKLE0189-MB1 BSD	77	71	76	75	76	76		0

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = p-Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-110)
S5 (2FP) = 2-Fluorophenol	(21-110)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

3C

WATER SEMIVOLATILE BLANK SPIKE/BLANK SPIKE DUPLICATE RECOVERY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Case No.: BECHTEL NEVADA V2428 RFW Lot No.: 0503L971

BLANK Spike - Sample No.: SBLKGKLE0189-MB1 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	BS CONCENTRATION (mg/L)	BS % REC #	QC LIMITS REC
Pyridine	0.0500	0	0.0359	72	9 -141
1,4-Dichlorobenzene	0.0500	0	0.0358	72	36 -97
2-Methylphenol	0.0500	0	0.0397	79	9 -141
3- and/or 4-Methylphenol	0.100	0	0.0759	76	9 -141
Hexachloroethane	0.0500	0	0.0354	71	9 -141
Nitrobenzene	0.0500	0	0.0390	78	9 -141
Hexachlorobutadiene	0.0500	0	0.0340	68	9 -141
2,4,6-Trichlorophenol	0.0500	0	0.0189	38	9 -141
2,4,5-Trichlorophenol	0.0500	0	0.0201	40	9 -141
2,4-Dinitrotoluene	0.0500	0	0.0401	80	24 -96
Hexachlorobenzene	0.0500	0	0.0404	81	9 -141
Pentachlorophenol	0.0500	0	0.00944	19	9 -103

COMPOUND	SPIKE ADDED (mg/L)	BSD CONCENTRATION (mg/L)	BSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Pyridine	0.0500	0.0275	55	26	50	9 -141
1,4-Dichlorobenzene	0.0500	0.0342	68	5	28	36 -97
2-Methylphenol	0.0500	0.0380	76	3	50	9 -141
3- and/or 4-Methylphenol	0.100	0.0738	74	2	50	9 -141
Hexachloroethane	0.0500	0.0340	68	4	50	9 -141
Nitrobenzene	0.0500	0.0370	74	5	50	9 -141
Hexachlorobutadiene	0.0500	0.0320	64	6	50	9 -141
2,4,6-Trichlorophenol	0.0500	0.0367	73	63 *	50	9 -141
2,4,5-Trichlorophenol	0.0500	0.0374	75	61 *	50	9 -141
2,4-Dinitrotoluene	0.0500	0.0352	70	13	38	24 -96
Hexachlorobenzene	0.0500	0.0384	77	5	50	9 -141
Pentachlorophenol	0.0500	0.0406	81	123 *	50	9 -103

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 3 out of 12 outside limits
Spike Recovery: 0 out of 24 outside limits

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Lionville Labs, Inc. Contract: 0052-01-01

Case No.: BECHTEL NEVADA V2428

Lab File ID: D031805 Lab Sample ID: 05LE0189-MB1

Date Extracted: 03/15/05 Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/18/05 Time Analyzed: 1420

Matrix: (Soil/Water) WATER Level: (low/med) LOW

Instrument ID: 5972d

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLKGKLE0189-MB1 BS	05LE0189-MB1S	D031803	03/18/05
02	SBLKGKLE0189-MB1 BSD	05LE0189-MB1T	D031804	03/18/05
03	CAU1150508	0503L971-001	D031806	03/18/05
04	CAU1150508DL	0503L971-001	D031809	03/18/05

COMMENTS:

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 03/15/05

CLIENT: BECHTEL NEVADA V2428 LVL LOT #: 0503L971

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	CAU1150508	pH	11.3	PH UNIT	0.01	1.0

CHAIN OF CUSTODY RECORD

Environmental Technical Services

SDG #: V2427

Chain of Custody No: 0502/WW/PAR

Sampling Event: 0411/ER/CAU 115 TEST CELL A

SEIR ID: 0502/ER/CAU 115 WASTE WATER

Collected By:

Laboratory: PAR28526

BN Record Owner: ER

Charge Code: 5B12 CZ50

0503133

Requested Analysis:

Area	Station	Sample ID	Sample Matrix	Collection Date Time	Filtered	LEVELS Anal.	LEVELS Priority	Pay Item	Description	Comments
25	CAU 115 TEST CELL "A" WW (1)	CAU1150508	WW	3/8/05 1345	U	CMP	14	GAM-A-001	GAMMA SPECTROSCOPY, 10 PCI/L CS-137 MDA	
				3/8/05 1349	U	CMP	14	GPC-A-007	Strontium-89/90; 1 pCi/L MDA; Water	
				3/8/05 1351	U	CMP	14	NAS-A-007	ISOTOPIC PLUTONIUM, 0.06 PCI/L MDA	
				3/8/05 1354	U	CMP	14	NAS-A-013	ISOTOPIC URANIUM, 0.06 PCI/LITER MDA	

Gamma Spectroscopy Results

PAI 713 Rev 8

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0503133
Client Name: Bechtel Nevada
ClientProject ID: 0411/ ER / CAU 115 Test Cell A V2427

Field ID: CAU1150508
Lab ID: 0503133-1

Library: LNG_GAM_A_00

Sample Matrix: WATER
Prep SOP: PAI 739 Rev 8
Date Collected: 08-Mar-05
Date Prepared: 16-Mar-05
Date Analyzed: 16-Mar-05

Prep Batch: GS050316-10
QCBatchID: GS050316-10-1
Run ID: gs050316-10a
Count Time: 400 minutes
Report Basis: Unfiltered

Final Aliquot: 1000 ml
Prep Basis: Unfiltered
Moisture(%): NA
Result Units: pCi/l
File Name: 050417D10A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Lab Qualifier
14331-83-0	Ac-228	3.22E+00 +/- 1.14E+01	1.90E+01	U
14596-10-2	Am-241	1.92E-01 +/- 1.21E+01	2.01E+01	U
14762-78-8	Ce-144	7.25E+00 +/- 1.15E+01	1.90E+01	U
10198-40-0	Co-60	6.02E-01 +/- 2.12E+00	3.57E+00	U
13967-70-9	Cs-134	-1.37E+00 +/- 3.48E+00	5.86E+00	U
10045-97-3	Cs-137	-4.82E-01 +/- 2.09E+00	3.56E+00	U
14683-23-9	Eu-152	2.88E+00 +/- 1.33E+01	2.23E+01	U
15585-10-1	Eu-154	1.18E+00 +/- 1.09E+01	1.84E+01	U
14391-16-3	Eu-155	6.55E-01 +/- 6.50E+00	1.09E+01	U
13966-00-2	K-40	1.21E+02 +/- 4.53E+01	6.77E+01	
15092-94-1	Pb-212	3.92E+00 +/- 4.76E+00	7.79E+00	U
14834-73-2	Pm-144	-2.09E+00 +/- 4.55E+00	7.60E+00	U
14834-74-3	Pm-146	-7.87E-01 +/- 2.15E+00	3.67E+00	U
13967-48-1	Ru-106	-7.04E-01 +/- 1.96E+01	3.30E+01	U
14683-10-4	Sb-124	7.08E+00 +/- 2.42E+00	3.50E+00	TI

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC or less than the associated TPU

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

SQ - Spectral quality prevents accurate quantitation.

SI - Nuclide identification and/or quantitation is tentative.

TI - Nuclide identification is tentative.

R - Nuclide has exceeded 8 halflives.

G - Sample density differs by more than 15% of LCS density.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)

MDC - Minimum Detectable Concentration (see PAI SOP 709)

BDL - Below Detection Limit

Data Package ID: *GSW0503133-1*

Gamma Spectroscopy Results

PAI 713 Rev 8

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0503133
Client Name: Bechtel Nevada
ClientProject ID: 0411/ ER / CAU 115 Test Cell A V2427

Field ID: CAU1150508
Lab ID: 0503133-1

Library: LNG_GAM_A_00

Sample Matrix: WATER
Prep SOP: PAI 739 Rev 8
Date Collected: 08-Mar-05
Date Prepared: 16-Mar-05
Date Analyzed: 16-Mar-05

Prep Batch: GS050316-10
QCBatchID: GS050316-10-1
Run ID: gs050316-10a
Count Time: 400 minutes
Report Basis: Unfiltered

Final Aliquot: 1000 ml
Prep Basis: Unfiltered
Moisture(%): NA
Result Units: pCi/l
File Name: 050417D10A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Lab Qualifier
14234-35-6	Sb-125	8.46E-01 +/- 4.28E+00	7.80E+00	U
15065-10-8	Th-234	-1.97E+01 +/- 4.86E+01	8.52E+01	U
15117-96-1	U-235	1.00E+01 +/- 1.15E+01	1.88E+01	U
13982-36-0	Y-88	3.88E+00 +/- 2.29E+00	3.57E+00	TI

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC or less than the associated TPU

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

SQ - Spectral quality prevents accurate quantitation.

SI - Nuclide identification and/or quantitation is tentative.

TI - Nuclide identification is tentative.

R - Nuclide has exceeded 8 halflives.

G - Sample density differs by more than 15% of LCS density.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)

MDC - Minimum Detectable Concentration (see PAI SOP 709)

BDL - Below Detection Limit

Data Package ID: *GSW0503133-1*

Strontium-90 Analysis by GFPC Sample Results Summary

Client Name: Bechtel Nevada
Client Project Name: 0411/ ER / CAU 115 Test Cell A
Client Project Number: V2427

Laboratory Name: Paragon Analytics
PAI Work Order: 0503133

Reported on: Monday, March 21, 2005 12:37:36 PM

Lab Sample ID	Client Sample ID	Sample Type	Nuclide	Result +/- 2 s TPU	MDC	Units	Matrix	Prep Batch	Date Analyzed	Flags
0503133-1	CAU1150508	Sample	Sr-90	3.96E-01 +/- 2.61E-01	4.97E-01	pCi/l	WATER	SR050315-1	3/18/2005	U

Comments:

Data Package ID: *SR900503133-1*

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

M - The requested MDC was not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)

MDC - Minimum Detectable Concentration (see PAI SOP 709)

BDL - Below Detection Limit

Isotopic Plutonium By Alpha Spectroscopy Sample Results Summary

Client Name: Bechtel Nevada
Client Project Name: 0411/ ER / CAU 115 Test Cell A
Client Project Number: V2427

Laboratory Name: Paragon Analytics
PAI Work Order: 0503133

Reported on: Thursday, March 24, 2005 1:02:10 PM

Lab Sample ID	Client Sample ID	Sample Type	Nuclide	Result +/- 2 s TPU	MDC	Units	Matrix	Prep Batch	Date Analyzed	Flags
0503133-1	CAU1150508	Sample	Pu-238	0E+00 +/- 1.32E-02	8.37E-03	pCi/l	WATER	AS050316-1	3/18/2005	U
0503133-1	CAU1150508	Sample	Pu-239/240	3.09E-03 +/- 1.32E-02	8.36E-03	pCi/l	WATER	AS050316-1	3/18/2005	U

Comments:

Data Package ID: *Pu0503133-1*

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

M - The requested MDC was not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)

MDC - Minimum Detectable Concentration (see PAI SOP 709)

BDL - Below Detection Limit

Isotopic Uranium By Alpha Spectroscopy Sample Results Summary

Client Name: Bechtel Nevada
Client Project Name: 0411/ ER / CAU 115 Test Cell A
Client Project Number: V2427

Laboratory Name: Paragon Analytics
PAI Work Order: 0503133

Reported on: Friday, April 01, 2005 12:04:26 PM

Lab Sample ID	Client Sample ID	Sample Type	Nuclide	Result +/- 2 s TPU	MDC	Units	Matrix	Prep Batch	Date Analyzed	Flags
0503133-1	CAU1150508	Sample	U-233/234	1.89E-02 +/- 2.81E-02	4.99E-02	pCi/l	WATER	AS050328-2	3/31/2005	U
0503133-1	CAU1150508	Sample	U-235	-5.64E-04 +/- 1.97E-02	4.29E-02	pCi/l	WATER	AS050328-2	3/31/2005	U
0503133-1	CAU1150508	Sample	U-238	1.80E-02 +/- 2.09E-02	3.49E-02	pCi/l	WATER	AS050328-2	3/31/2005	U

Comments:

Data Package ID: *U0503133-1*

Qualifiers/Flags:

U - Result is less than the sample specific MDC.
LT - Result is less than Requested MDC, greater than sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
Y2 - Chemical Yield outside default limits.
M - The requested MDC was not met.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

Abbreviations:
TPU - Total Propagated Uncertainty (see PAI SOP 743)
MDC - Minimum Detectable Concentration (see PAI SOP 709)

BDL - Below Detection Limit

Date Printed: Friday, April 01, 2005

Bechtel Nevada

ANALYTICAL LABORATORY

SERVICES REQUEST & CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT/CLIENT INFORMATION

Project: CAU 115 | BN Org #: B502

Charge Number: 5B12 CZ50

Project Manager: Jeff Smith

Phone: 5-7775 | Fax: 5-7761 | M/S: NTS 306

REPORT & TURNAROUND INFORMATION

Send Report to: Mike Kruzic

Phone: 5-7396 | Fax: 295-7761 | M/S: NTS 306

Turnaround: ☐ Standard - 14 days IH, 28 days Non-rad Env, 45 Days Rad Env,
☒ Rush - Preliminary by: ASAP (IH)
☐ 1 ☐ 2 ☒ 7 ☐ 14 (non-Rad Env)
☐ 1 ☐ 7 ☐ 14 ☐ 28 (Radiological Env)

SAMPLE INFORMATION

Sampling Site: Test Cell A / CAU 115

The samples submitted contain (check);
☒ **Hazardous** *(list)* - LEAD
☐ **Radioactive** *(list)* -
☐ **Unknown** contamination.
If known, identify contaminants.
This information will ensure compliance with applicable regulations and allow for the safe handling of the sample materials.

SAMPLE MANAGEMENT INFORMATION

SDG: _____ (IH) V2467 (Non-Rad Env) _____ (Rad Env)

Samples submitted are associated with a signed Project SOW ☒ Yes ☐ No

Analyses entered here agree with the SOW ☒ Yes ☐ No ☐ N/A

If not, identify the variation: _____

Subcontract Lab(s) used for this work: LIONVILLE

	ID/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	CONTAINER #	CONTAINER Est. Vol	QC MD	QC MS	QC MSD	Pres - Analysis eg. HCl - VOCs	Pay Item, Analysis, Method: 9.25 TCLP-LEAD
✓	115311 3-1	4/25/05	1100	Paint Chips	1	25g					X
✓	115311 3B-1	4/26/05	1345	Paint Chips	1	25g					X
✓	115311 3B-2	4/25/05	1405	Paint Chips	1	25g					X
✓	115 N-1	4/25/05	1600	Paint Chips	1	25g					X
			last Item								

CUSTODY TRANSFER

Sampled/Relinquished (print)	Signature	Date/Time	Received by (print)	Signature	Date/Time
Mike Flood		4/25/05 1730	Rebca	N/A	4/26/05 730
ER Sample Kelly	N/A	4/26/05 0780	Kevin Campbell		4/26/05 0750
Kevin Campbell		4/26/05 0824	CD Castaneda	CD Castaneda	4/26/05 @ 0824

Retention Code: ENV 5.c(1)

BN-0732 (04/02)

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 05/04/05

CLIENT: BECHTEL NEVADA V2467 LVL LOT #: 0504L329

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-005	1153113-1	Lead, TCLP Leachate	11.4 u	UG/L	11.4	6.0
-006	1153113B-1	Lead, TCLP Leachate	64.3	UG/L	11.4	6.0
-007	1153113B-2	Lead, TCLP Leachate	106	UG/L	11.4	6.0
-008	115N-1	Lead, TCLP Leachate	42.8	UG/L	11.4	6.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 05/04/05

CLIENT: BECHTEL NEVADA V2467 LVL LOT #: 0504L329

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	05L0231-MB1	Lead, TCLP Leachate	1.9	u	UG/L	1.9	1.0
BLANK2	05L0231-MB2	Lead, TCLP Leachate	11.4	u	UG/L	11.4	6.0
BLANK3	05L0231-MB3	Lead, TCLP Leachate	11.4	u	UG/L	11.4	6.0
BLANK4	05L0231-MB4	Lead, TCLP Leachate	11.4	u	UG/L	11.4	6.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 05/04/05

CLIENT: BECHTEL NEVADA V2467 LVL LOT #: 0504L329

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-005	1153113-1	Lead, TCLP Leachate	4380	11.4 u	5000	87.5	6.0

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 05/04/05

CLIENT: BECHTEL NEVADA V2467 LVL LOT #: 0504L329

WORK ORDER: 60052-001-001-0001-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	05L0231-LC1	Lead, LCS	2470	2500	UG/L	98.9

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APPENDIX C

FINAL RADIOLOGICAL SURVEY RESULTS

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Bechtel Nevada

RADIOLOGICAL SURVEY REPORT – DATA

SURVEY # 05-ER-A25-718

Location: Area 25 TCA	Purpose: Building Foot Print Safer Closure Survey.	Comments: Highest Readings Noted. See Map for Survey Locations.	Date/Time: 7/15/05 0700-1600

Instrument:	Serial #:	Cal Due:	Eff in %: Alpha / Beta	BKG in dpm: Alpha / Beta	MDA in dpm: Alpha / Beta
Tennelec	7842737	9/5/05	31.6 / 41.4	0.3 / 3.0	12 /16
L-2929	155587	8/22/05	34.8 / 48.8	0.0 / 172	7.8 / 70.6
L-3030 E	217600	11/26/05	37.6 / 50.8	0.0 / 158	7.2 / 66.3
Electra	4816	3/21/06	14.9 / 24.3	34 / 2734	80 / 500
Bicron	785	12/27/05	N/A	N/A	N/A

RWP # N/A

Work Package # 05-CAU-115TCA-2885

RCT Name: J. Houghton Signature:

RCT Name: S. Johnson Signature:

RCT Name: S. Munns Signature:

RCT Name: Signature:

Survey Point	Description/Comments	Removable dpm/100cm² Alpha	Removable dpm/100cm² Beta	Fixed + Removable dpm/100cm² Alpha	Fixed + Removable dpm/100cm² Beta	Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
N/A	A1	<MDA	<MDA	0	10000	0.05	N/A	0.05
N/A	A2	<MDA	<MDA	0	2000	0.03	N/A	0.03
N/A	A3	<MDA	<MDA	0	1000	0.02	N/A	0.02
N/A	A4	<MDA	<MDA	0	2000	0.02	N/A	0.02
N/A	A5	<MDA	<MDA	0	1000	0.02	N/A	0.02
N/A	A6	<MDA	<MDA	0	1000	0.02	N/A	0.02
N/A	A7	<MDA	<MDA	0	1000	0.02	N/A	0.02
N/A	A8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A9	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A13	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A14	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A15	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	A16	<MDA	<MDA	0	6000	0.05	N/A	0.05

Reviewed By (Print): Signature: Date: 7/22/05

Bechtel Nevada

RADIOLOGICAL SURVEY
REPORT – DATA (CONTINUATION)

SURVEY # 05-ER-A25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	A17	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	A18	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	A19	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	A20	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A21	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A22	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A23	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A24	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A25	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A26	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A27	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A28	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A29	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	A30	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	A31	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B1	<MDA	<MDA	0	6000	0.05	N/A	0.05
N/A	B2	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B4	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B5	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B6	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B7	<MDA	<MDA	0	6000	0.05	N/A	0.05
N/A	B8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B9	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B10	<MDA	<MDA	0	6000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	B11	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	B12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B13	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B14	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B15	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B16	<MDA	<MDA	0	4000	0.05	N/A	0.05
N/A	B17	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B18	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B19	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B20	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B21	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B22	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B23	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B24	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B25	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B26	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	B27	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B28	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B29	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	B30	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	B31	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	C1	<MDA	<MDA	0	6000	0.05	N/A	0.05
N/A	C2	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C4	<MDA	<MDA	0	1000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	C5	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C6	<MDA	<MDA	0	33000	0.05	N/A	0.05
N/A	C7	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C9	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	C10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C13	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C14	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C15	<MDA	<MDA	0	14000	0.05	N/A	0.05
N/A	C16	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C17	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	C18	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	C19	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C20	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C21	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C22	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C23	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C24	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C25	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C26	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C27	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C28	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C29	<MDA	<MDA	0	1000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	C30	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	C31	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D1	<MDA	<MDA	0	11000	0.05	N/A	0.05
N/A	D2	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D4	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D5	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D6	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D7	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D9	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	D10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D12	<MDA	<MDA	0	7000	0.05	N/A	0.05
N/A	D13	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D14	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D15	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D16	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D17	<MDA	<MDA	0	11000	0.05	N/A	0.05
N/A	D18	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	D19	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D20	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D21	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D22	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D23	<MDA	<MDA	0	1000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	D24	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D25	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D26	<MDA	<MDA	0	4000	0.05	N/A	0.05
N/A	D27	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	D28	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D29	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D30	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	D31	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	E1	<MDA	<MDA	0	11000	0.05	N/A	0.05
N/A	E2	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	E3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	E4	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	E5	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	E6	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	E7	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	E8	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	E9	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	E10	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	E11	<MDA	<MDA	0	9000	0.05	N/A	0.05
N/A	E12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F1	<MDA	<MDA	0	10000	0.05	N/A	0.05
N/A	F2	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F4	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F5	<MDA	<MDA	0	1000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	F6	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F7	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F9	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	F12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G1	<MDA	<MDA	0	16000	0.05	N/A	0.05
N/A	G2	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G4	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G5	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G6	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G7	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G9	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	G12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H1	<MDA	<MDA	0	16000	0.05	N/A	0.05
N/A	H2	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	H3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H4	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H5	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H6	<MDA	<MDA	0	1000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	H7	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H9	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	H12	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I1	<MDA	<MDA	0	16000	0.05	N/A	0.05
N/A	I2	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	I3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I4	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I5	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I6	<MDA	<MDA	0	18000	0.05	N/A	0.05
N/A	I7	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I9	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	I10	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I11	<MDA	<MDA	0	11000	0.05	N/A	0.05
N/A	I12	<MDA	<MDA	0	8000	0.05	N/A	0.05
N/A	I13	<MDA	<MDA	0	3000	0.05	N/A	0.05
N/A	I14	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I15	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	I16	<MDA	<MDA	0	4000	0.05	N/A	0.05
N/A	I17	<MDA	<MDA	0	12000	0.05	N/A	0.05
N/A	I18	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	J1	<MDA	<MDA	0	23000	0.05	N/A	0.05

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	J2	<MDA	<MDA	0	12000	0.05	N/A	0.05
N/A	J3	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	J4	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	J5	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	J6	<MDA	<MDA	0	4000	0.05	N/A	0.05
N/A	J7	<MDA	<MDA	0	9000	0.05	N/A	0.05
N/A	J8	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	J9	<MDA	<MDA	0	30000	0.05	N/A	0.05
N/A	J10	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	J11	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	J12	<MDA	<MDA	0	6000	0.05	N/A	0.05
N/A	J13	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	J14	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	J15	<MDA	<MDA	0	6000	0.05	N/A	0.05
N/A	J16	<MDA	<MDA	0	5000	0.05	N/A	0.05
N/A	J17	<MDA	<MDA	0	2000	0.05	N/A	0.05
N/A	J18	<MDA	<MDA	0	1000	0.05	N/A	0.05
N/A	K1	<MDA	<MDA	0	26000	0.03	N/A	0.03
N/A	K2	<MDA	<MDA	0	20000	0.02	N/A	0.02
N/A	K3	<MDA	<MDA	0	18000	0.02	N/A	0.02
N/A	K4	<MDA	<MDA	0	5000	0.02	N/A	0.02
N/A	K5	<MDA	<MDA	0	14000	0.02	N/A	0.02
N/A	K6	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	K7	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	K8	<MDA	<MDA	0	4000	0.02	N/A	0.02

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RADIOLOGICAL SURVEY REPORT – DATA (CONTINUATION)

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Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	K9	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	K10	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	K11	<MDA	<MDA	0	2000	0.02	N/A	0.02
N/A	K12	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	K13	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	K14	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	K15	<MDA	<MDA	0	2000	0.02	N/A	0.02
N/A	K16	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	K17	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	K18	<MDA	<MDA	0	5000	0.02	N/A	0.02
N/A	K19	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	L1	<MDA	<MDA	0	20000	0.03	N/A	0.03
N/A	L2	<MDA	<MDA	0	30000	0.02	N/A	0.02
N/A	L3	<MDA	<MDA	0	33000	0.02	N/A	0.02
N/A	L4	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	L5	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	L6	<MDA	<MDA	0	5000	0.02	N/A	0.02
N/A	L7	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	L8	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	L9	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	L10	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	L11	<MDA	<MDA	0	7000	0.02	N/A	0.02
N/A	L12	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	L13	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	L14	<MDA	<MDA	0	5000	0.02	N/A	0.02

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	L15	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	L16	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	L17	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	L18	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	L19	<MDA	<MDA	0	12000	0.02	N/A	0.02
N/A	M1	<MDA	<MDA	0	320000	0.2	N/A	0.2
N/A	M2	<MDA	<MDA	0	60000	0.03	N/A	0.03
N/A	M3	<MDA	<MDA	0	50000	0.03	N/A	0.03
N/A	M4	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	M5	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	M6	<MDA	<MDA	0	25000	0.02	N/A	0.02
N/A	M7	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	M8	<MDA	<MDA	0	18000	0.02	N/A	0.02
N/A	M9	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	M10	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	M11	<MDA	<MDA	0	12000	0.02	N/A	0.02
N/A	M12	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	M13	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	M14	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	M15	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	M16	<MDA	<MDA	0	9000	0.02	N/A	0.02
N/A	M17	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	M18	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	M19	<MDA	<MDA	0	30000	0.02	N/A	0.02
N/A	N1	<MDA	<MDA	0	420000	1.2	N/A	1.2

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RADIOLOGICAL SURVEY REPORT – DATA (CONTINUATION)

SURVEY # 05-ER-A25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	N2	<MDA	<MDA	0	30000	0.04	N/A	0.04
N/A	N3	<MDA	<MDA	0	70000	0.03	N/A	0.03
N/A	N4	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	N5	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	N6	<MDA	<MDA	0	12000	0.02	N/A	0.02
N/A	N7	<MDA	<MDA	0	50000	0.02	N/A	0.02
N/A	N8	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	N9	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	N10	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	N11	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	N12	<MDA	<MDA	0	90000	0.02	N/A	0.02
N/A	N13	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	N14	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	N15	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	N16	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	N17	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	N18	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	N19	<MDA	<MDA	0	12000	0.02	N/A	0.02
N/A	O1	<MDA	<MDA	0	50000	0.04	N/A	0.04
N/A	O2	<MDA	<MDA	0	40000	0.03	N/A	0.03
N/A	O3	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	O4	<MDA	<MDA	0	2000	0.02	N/A	0.02
N/A	O5	<MDA	<MDA	0	50000	0.02	N/A	0.02
N/A	O6	<MDA	<MDA	0	40000	0.02	N/A	0.02
N/A	O7	<MDA	<MDA	0	5000	0.02	N/A	0.02

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RADIOLOGICAL SURVEY
REPORT – DATA (CONTINUATION)

SURVEY # 05-ER-A25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	O8	<MDA	<MDA	0	20000	0.02	N/A	0.02
N/A	O9	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	O10	<MDA	<MDA	0	60000	0.02	N/A	0.02
N/A	O11	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	O12	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	O13	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	O14	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	O15	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	O16	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	O17	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	O18	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	O19	<MDA	<MDA	0	45000	0.02	N/A	0.02
N/A	P1	<MDA	<MDA	0	30000	0.03	N/A	0.03
N/A	P2	<MDA	<MDA	0	21000	,03	N/A	,03
N/A	P3	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	P4	<MDA	<MDA	0	20000	0.02	N/A	0.02
N/A	P5	<MDA	<MDA	0	40000	0.02	N/A	0.02
N/A	P6	<MDA	<MDA	0	14000	0.02	N/A	0.02
N/A	P7	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	P8	<MDA	<MDA	0	20000	0.02	N/A	0.02
N/A	P9	<MDA	<MDA	0	13000	0.02	N/A	0.02
N/A	P10	<MDA	<MDA	0	50000	0.02	N/A	0.02
N/A	P11	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	P12	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	P13	<MDA	<MDA	0	10000	0.02	N/A	0.02

Bechtel Nevada

RADIOLOGICAL SURVEY
REPORT – DATA (CONTINUATION)

SURVEY # 05-ER-A25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	P14	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	P15	<MDA	<MDA	0	3000	0.02	N/A	0.02
N/A	P16	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	P17	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	P18	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	P19	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	Q1	<MDA	<MDA	0	30000	0.03	N/A	0.03
N/A	Q2	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	Q3	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	Q4	<MDA	<MDA	0	25000	0.02	N/A	0.02
N/A	Q5	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	Q6	<MDA	<MDA	0	13000	0.02	N/A	0.02
N/A	Q7	<MDA	<MDA	0	15000	0.02	N/A	0.02
N/A	Q8	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	Q9	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	Q10	<MDA	<MDA	0	6000	0.02	N/A	0.02
N/A	Q11	<MDA	<MDA	0	9000	0.02	N/A	0.02
N/A	Q12	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	Q13	<MDA	<MDA	0	25000	0.02	N/A	0.02
N/A	Q14	<MDA	<MDA	0	10000	0.02	N/A	0.02
N/A	Q15	<MDA	<MDA	0	8000	0.02	N/A	0.02
N/A	Q16	<MDA	<MDA	0	4000	0.02	N/A	0.02
N/A	Q17	<MDA	<MDA	0	5000	0.02	N/A	0.02
N/A	Q18	<MDA	<MDA	0	11000	0.02	N/A	0.02

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	U15	<MDA	<MDA	0	3500	.02	N/A	.02
N/A	U16	<MDA	<MDA	0	3000	02	N/A	.02
N/A	U17	<MDA	<MDA	0	3.200	02	N/A	.02
N/A	U18	<MDA	<MDA	0	8000	02	N/A	.02
N/A	U19	<MDA	<MDA	0	9000	02	N/A	.02
N/A	V1	<MDA	<MDA	0	45000	.08	N/A	.08
N/A	V2	<MDA	<MDA	0	6000	.02	N/A	.02
N/A	V3	<MDA	<MDA	0	5000	02	N/A	.02
N/A	V4	<MDA	<MDA	0	5000	02	N/A	.02
N/A	V5	<MDA	<MDA	0	6000	02	N/A	.02
N/A	V6	<MDA	<MDA	0	14000	02	N/A	.02
N/A	V7	<MDA	<MDA	0	6000	02	N/A	.02
N/A	V8	<MDA	<MDA	0	8000	02	N/A	.02
N/A	V9	<MDA	<MDA	0	7000	02	N/A	.02
N/A	V10	<MDA	<MDA	0	12000	02	N/A	.02
N/A	V11	<MDA	<MDA	0	8000	02	N/A	.02
N/A	V12	<MDA	<MDA	0	6000	02	N/A	.02
N/A	V13	<MDA	<MDA	0	10000	02	N/A	.02
N/A	V14	<MDA	<MDA	0	5000	02	N/A	.02
N/A	V15	<MDA	<MDA	0	8000	02	N/A	.02
N/A	V16	<MDA	<MDA	0	20000	02	N/A	.02
N/A	V17	<MDA	<MDA	0	17000	02	N/A	.02
N/A	V18	<MDA	<MDA	0	5000	02	N/A	.02
N/A	V19	<MDA	<MDA	0	4000	02	N/A	.02

Bechtel Nevada

RADIOLOGICAL SURVEY
REPORT – DATA (CONTINUATION)

SURVEY # 05-ER-A25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	T10	<MDA	<MDA	0	10000	.02	N/A	.02
N/A	T11	<MDA	<MDA	0	4600	.02	N/A	.02
N/A	T12	<MDA	<MDA	0	10000	.02	N/A	.02
N/A	T13	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	T14	<MDA	<MDA	0	4300	.02	N/A	.02
N/A	T15	<MDA	<MDA	0	4600	.02	N/A	.02
N/A	T16	<MDA	<MDA	0	3200	.02	N/A	.02
N/A	T17	<MDA	<MDA	0	3800	.02	N/A	.02
N/A	T18	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	T19	<MDA	<MDA	0	9000	.02	N/A	.02
N/A	U1	<MDA	<MDA	0	15000	.02	N/A	.02
N/A	U2	<MDA	<MDA	0	9000	.02	N/A	.02
N/A	U3	<MDA	<MDA	0	6000	.02	N/A	.02
N/A	U4	<MDA	<MDA	0	15000	.02	N/A	.02
N/A	U5	<MDA	<MDA	0	4300	.02	N/A	.02
N/A	U6	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	U7	<MDA	<MDA	0	3500	.02	N/A	.02
N/A	U8	<MDA	<MDA	0	3700	.02	N/A	.02
N/A	U9	<MDA	<MDA	0	4100	.02	N/A	.02
N/A	U10	<MDA	<MDA	0	3900	.02	N/A	.02
N/A	U11	<MDA	<MDA	0	4500	.02	N/A	.02
N/A	U12	<MDA	<MDA	0	4500	.02	N/A	.02
N/A	U13	<MDA	<MDA	0	3000	.02	N/A	.02
N/A	U14	<MDA	<MDA	0	3200	.02	N/A	.02

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	S5	<MDA	<MDA	0	6000	.02	N/A	.02
N/A	S6	<MDA	<MDA	0	5000	.02	N/A	.02
N/A	S7	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	S8	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	S9	<MDA	<MDA	0	22000	.02	N/A	.02
N/A	S10	<MDA	<MDA	0	18000	.02	N/A	.02
N/A	S11	<MDA	<MDA	0	4600	.02	N/A	.02
N/A	S12	<MDA	<MDA	0	10000	.02	N/A	.02
N/A	S13	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	S14	<MDA	<MDA	0	4300	.02	N/A	.02
N/A	S15	<MDA	<MDA	0	4600	.02	N/A	.02
N/A	S16	<MDA	<MDA	0	3200	.02	N/A	.02
N/A	S17	<MDA	<MDA	0	3800	.02	N/A	.02
N/A	S18	<MDA	<MDA	0	16000	.02	N/A	.02
N/A	S19	<MDA	<MDA	0	12000	.02	N/A	.02
N/A	T1	<MDA	<MDA	0	30000	.02	N/A	.02
N/A	T2	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	T3	<MDA	<MDA	0	5000	.02	N/A	.02
N/A	T4	<MDA	<MDA	0	4000	.02	N/A	.02
N/A	T5	<MDA	<MDA	0	5000	.02	N/A	.02
N/A	T6	<MDA	<MDA	0	4000	.02	N/A	.02
N/A	T7	<MDA	<MDA	0	12000	.02	N/A	.02
N/A	T8	<MDA	<MDA	0	3800	.02	N/A	.02
N/A	T9	<MDA	<MDA	0	11000	.02	N/A	.02

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RADIOLOGICAL SURVEY
REPORT – DATA (CONTINUATION)

SURVEY # 05-ER-A25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	Q19	<MDA	<MDA	0	15000	.02	N/A	.02
N/A	R1	<MDA	<MDA	0	30000	.02	N/A	.02
N/A	R2	<MDA	<MDA	0	10000	.02	N/A	.02
N/A	R3	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	R4	<MDA	<MDA	0	15000	.02	N/A	.02
N/A	R5	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	R6	<MDA	<MDA	0	6000	.02	N/A	.02
N/A	R7	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	R8	<MDA	<MDA	0	6000	.02	N/A	.02
N/A	R9	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	R10	<MDA	<MDA	0	30000	.02	N/A	.02
N/A	R11	<MDA	<MDA	0	5000	.02	N/A	.02
N/A	R12	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	R13	<MDA	<MDA	0	35000	.02	N/A	.02
N/A	R14	<MDA	<MDA	0	8000	.02	N/A	.02
N/A	R15	<MDA	<MDA	0	25000	.02	N/A	.02
N/A	R16	<MDA	<MDA	0	5000	.02	N/A	.02
N/A	R17	<MDA	<MDA	0	10000	.02	N/A	.02
N/A	R18	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	R19	<MDA	<MDA	0	15000	.02	N/A	.02
N/A	S1	<MDA	<MDA	0	15000	.02	N/A	.02
N/A	S2	<MDA	<MDA	0	32000	.02	N/A	.02
N/A	S3	<MDA	<MDA	0	7000	.02	N/A	.02
N/A	S4	<MDA	<MDA	0	6000	.02	N/A	.02

Bechtel Nevada

RADIOLOGICAL SURVEY REPORT – DATA (CONTINUATION)

SURVEY # ER-25-718

Survey Point	Description/Comments	Removable dpm/100cm²		Fixed + Removable dpm/100cm²		Gamma mrem/hr	Neutron mrem/hr	Total mrem/hr
		Alpha	Beta	Alpha	Beta			
N/A	G12	<MDA	<MDA	0	1000	.02	N/A	.02
N/A	H12	<MDA	<MDA	0	1000	.02	N/A	.02
N/A	J19	<MDA	<MDA	0	1000	.02	N/A	.02
N/A	I19	<MDA	<MDA	0	1000	.02	N/A	.02

Tennelec Series 5E — SAMPLE ACTIVITY — 07/12005
Unit ID: 764[illegible] — 10:01:45
User: Guest — Procedure: Routine — CPD 0.15

Mode:	dS	Time Min:	1.00	Smpl Pos:	1	Grp Pos:	001:001
Bkg Mon:	Auto/Sys	Eff Calc:	Auto/Sys	Act Calc:	Yes/On	Spc Corr:	No/Off
α Preset:	4000000	β Preset:	40000000	Wt Time:	0.00	Wt Cts:	0
dULD kPS:	0.25	bULD kPS:	70.00	aLLD kPS:	70.10	aULD kPS:	100.00

α-β Plat:	C)-3σ β	07Mar2005	1440			
α Bkg:	BkgBlank	07Mar2005	0.10	±	0.10	
β Bkg:	BkgBlank	07Mar2005	1.20	±	0.34	
α Eff.	Pu 9684	07Mar2005	51.55	±7.15E-02		
β Eff	C)-3σ β	07Mar2005	41.17	±7.57E-02		
nα:	1.00	± 0.00	α MDA:	12 ~~17~~	dpm	
α Action:	20.00	0.00	0.00	0.00	dpm	
nβ:	1.00	± 0.00	β MDA:	16 ~~1.36~~	dpm	
β Action:	1000.00	0.00	0.00	0.00	dpm	

OT 7-15-05

SAMPLE Num:RPT	TIME Min	SAMPLE START	ALPHA dpm	BETA dpm	ALPHA ACTION	BETA ACTION
001:001	1.00	10:03:03	-0.61	1.93		
002:001	1.00	10:04:24	2.85	5.76		
003:001	1.00	10:05:41	-0.31	-0.48		
004:001	1.00	10:06:55	-0.31	-0.48		
005:001	1.00	10:08:15	2.85	5.76		
006:001	1.00	10:09:32	-0.21	1.92		
007:001	1.00	10:10:48	-0.31	-0.48		
008:001	1.00	10:12:05	2.85	1.93		
009:001	1.00	10:13:22	-0.31	0.19		
010:001	1.00	10:14:39	-0.21	1.92		
011:001	1.00	10:15:56	-0.31	[illegible]		
012:001	1.00	10:17:12	-0.31	[illegible]		
013:001	1.00	10:18:29	-0.31	[illegible]		
014:001	1.00	10:19:46	-0.31	-0.48		
015:001	1.00	10:21:03	-0.31	-0.48		
016:001	1.00	10:22:19	-0.31	-0.48		
017:001	1.00	10:23:36	-0.31	-0.48		
018:001	1.00	10:24:53	-0.31	-0.48		
019:001	1.00	10:26:10	-0.31	-0.48		
020:001	1.00	10:27:26	-0.31	-0.48		
021:001	1.00	10:28:43	-0.31	-0.48		
022:001	1.00	10:30:00	-0.31	-0.48		

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Sonde # 05-ER-AZS-718

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Tennelec Series 5E — SAMPLE ACTIVITY — 15Jul2005
Unit ID: 7842737 — 10:01:43
User: Guest — Procedure: Routine — BKG 0.13

SAMPLE NUM:RPT	TIME MIN	SAMPLE START	ALPHA dpm	BETA cpm	ALPHA ACTION	BETA ACTION
872:001	1.00	11:33:50	-0.31	-2.90		
873:001	1.00	11:35:07	-0.31	4.35		
874:001	1.00	11:36:24	2.65	-2.90		
875:001	1.00	11:37:40	-0.31	1.45		
876:001	1.00	11:38:57	-0.31	-0.48		
877:001	1.00	11:40:13	-0.31	9.18		
878:001	1.00	11:41:29	-0.31	0.96		
879:001	1.00	11:42:46	-0.31	-2.90		
880:001	1.00	11:44:02	-0.31	-2.90		
881:001	1.00	11:45:18	-0.31	-2.90		
882:001	1.00	11:46:35	-0.31	-0.48		
883:001	1.00	11:47:51	-0.31	-0.48		
884:001	1.00	11:49:08	-0.31	-0.48		
885:001	1.00	11:50:24	-0.31	1.45		
886:001	1.00	11:51:41	-0.31	-2.90		
887:001	1.00	11:52:57	-0.31	1.45		
888:001	1.00	11:54:13	1.35	4.35		
889:001	1.00	11:55:30	3.65	-0.43		
890:001	1.00	11:56:47	-0.31	-0.48		
891:001	1.00	11:58:03	-0.31	-2.90		
892:001	1.00	11:59:20	1.65	2.90		
893:001	1.00	12:00:36	-0.31	-2.90		
894:001	1.00	12:01:53	-0.31	-2.90		
895:001	1.00	12:03:10	-0.31	-2.90		
896:001	1.00	12:04:26	-0.31	-0.48		
897:001	1.00	12:05:43	-0.31	-0.48		
898:001	1.00	12:06:59	-0.31	4.35		
899:001	1.00	12:08:15	-0.31	1.45		
900:001	1.00	12:09:32	-0.31	-0.48		

Page 9/Done — Authorized: _____

SURVEY # 05-ER-A25-918

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Tennelec Series 5E — SAMPLE ACTIVITY — 15Jul2005
Unit ID: 7842737 — 12:33:49
User: Guest — Procedure: Routine — CRD 0.1%

Mode:	αβ	Time Min:	1.00	Smpl Rpt:	1	Grp Rpt:	001:001
Bkg Sub:	Auto/Sys	Eff Calc:	Auto/Sys	Act Calc:	Yes/On	Spl Corr:	No/Off
α Preset:	90000000	β Preset:	90000000	Wk Time:	0.00	Wk Cts:	0
BLLD %FS:	0.25	BULD %FS:	70.00	αLLD %FS:	70.10	αULD %FS:	100.00

α+β Plat:	Cl-36 β	07Mar2005	1460		
α Bkg:	BkgBlank	07Mar2005	0.10	± 0.10	
β Bkg:	BkgBlank	07Mar2005	1.20	± 0.34	
α Eff:	Pu 9684	07Mar2005	31.55	±7.15E-01	
β Eff:	Cl-36 β	07Mar2005	41.37	±7.57E-02	
Ka:	1.00	± 0.00	α MDA:	12 ~~1.72~~	dpm
α Action:	20.00	0.00	0.00	0.00	dpm
Kβ:	1.00	± 0.00	β MDA:	16 ~~1.56~~	dpm
β Action:	1000.00	0.00	0.00	0.00	dpm

JH 7-16-05

SAMPLE NUM:RPT	TIME MIN	SAMPLE START	ALPHA cpm	BETA cpm	ALPHA ACTION	BETA ACTION
001:001	1.00	12:34:02	-0.31	-0.48		
002:001	1.00	12:35:18	-0.31	-2.90		
003:001	1.00	12:36:35	-0.31	1.93		
004:001	1.00	12:37:52	-0.31	-2.90		
005:001	1.00	12:39:09	-0.31	1.93		
006:001	1.00	12:40:26	-0.31	4.33		
007:001	1.00	12:41:42	-0.31	1.93		
008:001	1.00	12:42:59	-0.31	-2.90		
009:001	1.00	12:44:16	-0.31	6.76		
010:001	1.00	12:45:33	-0.31	1.93		
011:001	1.00	12:46:50	-0.31	-2.90		
012:001	1.00	12:48:06	-0.31	1.93		
013:001	1.00	12:49:23	-0.31	-2.90		
014:001	1.00	12:50:40	-0.31	-2.90		
015:001	1.00	12:51:57	-0.31	1.93		
016:001	1.00	12:53:14	2.65	-0.48		
017:001	1.00	12:54:30	-0.31	-0.48		
018:001	1.00	12:55:47	1.65	6.76		
019:001	1.00	12:57:04	-0.31	-2.90		
020:001	1.00	12:58:21	-0.31	4.35		
021:001	1.00	12:59:37	1.33	-0.48		
022:001	1.00	13:00:54	-0.31	4.35		
023:001	1.00	13:02:11	-0.31	1.93		
024:001	1.00	13:03:28	-0.31	-0.48		
025:001	1.00	13:04:45	-0.31	1.93		
026:001	1.00	13:06:01	-0.31	-2.90		
027:001	1.00	13:07:18	-0.31	1.93		
028:001	1.00	13:08:35	-0.31	1.93		

Page 1/More — Authorized: _____

Tennelec Series 5E | SAMPLE ACTIVITY | 15Jul2005
Unit ID: 7842737 | 12:33:49
User: Guest | Procedure: Routine | CRD 0.15

SAMPLE NUM:RPT	TIME min	SAMPLE START	ALPHA dpm	BETA dpm	ALPHA ACTION	BETA ACTION
029:001	1.00	13:09:52	-0.31	-0.48		
030:001	1.00	13:11:09	-0.31	-0.48		
031:001	1.00	13:12:25	-0.31	-0.48		
032:001	1.00	13:13:42	-0.31	-0.48		
033:001	1.00	13:14:59	-0.31	-0.48		
034:001	1.00	13:16:16	-0.31	-0.48		
035:001	1.00	13:17:33	-0.31	-2.90		
036:001	1.00	13:18:50	-0.31	-0.48		
037:001	1.00	13:20:06	-0.31	-0.48		
038:001	1.00	13:21:23	2.85	0.76		
039:001	1.00	13:22:40	-0.31	6.76		
040:001	1.00	13:23:57	-0.31	4.35		
041:001	1.00	13:25:14	-0.31	-0.48		
042:001	1.00	13:26:31	-0.31	-0.48		
043:001	1.00	13:27:47	-0.31	4.35		
044:001	1.00	13:29:04	-0.31	-0.48		
045:001	1.00	13:30:20	-0.31	6.76		
046:001	1.00	13:31:37	-0.31	1.93		
047:001	1.00	13:32:54	-0.31	-0.48		
048:001	1.00	13:34:11	-0.31	1.93		
049:001	1.00	13:35:27	-0.31	1.93		
050:001	1.00	13:36:44	-0.31	0.76		
051:001	1.00	13:38:01	-0.31	6.76		
052:001	1.00	13:39:17	-0.31	-0.48		
053:001	1.00	13:40:34	2.85	1.93		
054:001	1.00	13:41:51	-0.31	-0.48		
055:001	1.00	13:43:08	-0.31	-0.48		
056:001	1.00	13:44:25	-0.31	4.35		
057:001	1.00	13:45:41	-0.31	1.93		
058:001	1.00	13:46:58	2.85	-0.48		
059:001	1.00	13:48:15	-0.31	1.93		
060:001	1.00	13:49:31	-0.31	1.93		
061:001	1.00	13:50:47	-0.31	1.93		
062:001	1.00	13:52:04	-0.31	-2.90		
063:001	1.00	13:53:20	-0.31	1.93		
064:001	1.00	13:54:37	-0.31	1.93		
065:001	1.00	13:55:54	-0.31	1.93		
066:001	1.00	13:57:11	-0.31	-0.48		
067:001	1.00	13:58:27	2.85	-0.48		
068:001	1.00	13:59:44	-0.31	-0.48		
069:001	1.00	14:01:01	2.85	6.76		
070:001	1.00	14:02:18	2.85	1.93		
071:001	1.00	14:03:35	-0.31	1.93		

Authorized: 2/2

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Tennelec Series 97 — SAMPLE ACTIVITY — 15Jul2005
Unit ID: 7642TCT — 12:03:49
User: Guest — Procedure: Routine — CRO @ 15

SAMPLE NUM:REP	TIME MIN	SAMPLE START	ALPHA dpm	BETA dpm	ALPHA ACTION	BETA ACTION
872:001	1.00	14:04:50	2.85	-2.90		
873:001	1.00	14:06:09	-0.71	-0.45		
874:001	1.00	14:07:26	-0.71	4.05		
875:001	1.00	14:08:43	-0.35	-0.90		
876:001	1.00	14:09:54	-0.35	1.51		
877:001	1.00	14:11:15	-0.71	-0.43		
878:001	1.00	14:12:33	-0.35	1.93		
879:001	1.00	14:13:50	2.85	4.15		
880:001	1.00	14:15:06	-0.71	2.52		
881:001	1.00	14:16:23	-0.71	1.91		
882:001	1.00	14:17:40	-0.71	-0.45		
883:001	1.00	14:18:57	-0.71	-0.88		
884:001	1.00	14:20:14	-0.71	1.91		
885:001	1.00	14:21:31	2.85	1.96		
886:001	1.00	14:22:47	-0.31	4.75		
887:001	1.00	14:24:04	-0.71	-0.43		
888:001	1.00	14:25:21	-0.71	-0.47		
889:001	1.00	14:26:38	-0.71	-0.49		
890:001	1.00	14:27:55	-0.31	-0.90		
891:001	1.00	14:29:11	-0.71	-0.45		
892:001	1.00	14:30:28	-0.31	1.91		
893:001	1.00	14:31:43	2.85	-0.45		
894:001	1.00	14:33:00	-0.31	0.36		
895:001	1.00	14:34:17	-0.71	4.35		
896:001	1.00	14:35:33	-0.71	-0.49		
897:001	1.00	14:36:50	-0.31	4.33		
898:001	1.00	14:38:07	-0.71	1.91		
899:001	1.00	14:39:24	-0.31	4.13		
900:001	1.00	14:40:40	-0.31	4.75		
901:001	1.00	14:41:57	-0.31	-0.45		

Page 1 done — Submitted: _____

SURVEY # 05-ER-A25-918

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Template: Series 5E — SAMPLE ACTIVITY — 16Jul2005
Unit ID: "SaIVIT" — 08:48:01
User: Guest — Procedure: Routine — CRO 0.15

Mode:	αβ	Time Min:	1.00	Smpl Rpt:	1	Grp Rpt:	001:001
Svg Int:	Auto/Sys	Eff Calc:	Auto/Sys	Act Calc:	Yes/On	Spl Corr:	No/Off
α Preset:	90000000	β Preset:	90000000	Wk Time:	0.00	Wk Cts:	0
αLLD %FS:	0.25	αULD %FS:	70.00	βLLD %FS:	70.10	βULD %FS:	100.00

α+β Plat:	Cl-Jn β	07Mar2005	1440		
α Bkg:	BkgBlank	07Mar2005	0.10	± 0.10	
β Bkg:	BkgBlank	07Mar2005	1.20	± 0.34	
α Eff:	Pu 9684	07Mar2005	31.53	±7.15E-02	
β Eff:	Cl-Jn β	07Mar2005	41.37	±7.87E-02	
n:	1.00	± 0.00	α MDA:	12 ~~22~~	dpm
α Action:	20.00	0.00	0.00	0.00	cpm
n:	1.00	± 0.00	β MDA:	16 ~~31~~	dpm
β Action:	1000.00	0.00	0.00	0.00	cpm

DT 7-16-05

Sample Num	Time	Sample ID	Alpha Raw	Beta Raw	Alpha Action	Beta Action
001:001	1.00	06:46:12	1.65	-0.48		
002:001	1.00	06:47:19	-0.31	1.93		
003:001	1.00	06:50:46	-0.31	5.18		
004:001	1.00	06:52:07	1.85	-2.90		
005:001	1.00	06:53:20	-0.31	-0.48		
006:001	1.00	06:54:26	-0.31	-0.48		
007:001	1.00	06:55:32	-0.31	1.93		
008:001	1.00	06:57:09	-0.31	0.76		
009:001	1.00	06:58:26	-0.31	-0.48		
010:001	1.00	06:59:43	-0.31	-0.48		
011:001	1.00	07:01:00	-0.31	-0.48		
012:001	1.00	07:02:16	-0.31	1.93		
013:001	1.00	07:03:33	-0.31	1.90		
014:001	1.00	07:04:49	-0.31	-2.90		
015:001	1.00	07:06:06	-0.31	-2.90		
016:001	1.00	07:07:23	-0.31	0.90		
017:001	1.00	07:08:39	-0.31	4.35		
018:001	1.00	07:09:55	-0.31	0.93		
019:001	1.00	07:11:12	2.85	6.76		
020:001	1.00	07:12:29	-0.31	4.35		
021:001	1.00	07:13:46	-0.31	-0.48		
022:001	1.00	07:15:02	-0.31	-0.48		
023:001	1.00	07:16:19	2.85	3.93		
024:001	1.00	07:17:35	-0.31	4.35		
025:001	1.00	07:18:51	2.85	1.93		
026:001	1.00	07:20:08	-0.31	1.93		
027:001	1.00	07:21:24	-0.31	-0.48		
028:001	1.00	07:22:41	-0.31	1.93		

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Tennelec Series 5E — SAMPLE ACTIVITY — 16Jul2005
Unit ID: 7842737 — 06:48:01
User: Guest — Procedure: Routine — CRD 0.15

SAMPLE NUM:RPT	TIME Min	SAMPLE START	ALPHA dpm	BETA dpm	ALPHA ACTION	BETA ACTION
029:001	1.00	07:23:57	-0.31	-2.90		
030:001	1.00	07:25:14	-0.31	-0.48		
031:001	1.00	07:26:31	-0.31	-0.48		
032:001	1.00	07:27:47	-0.31	-0.48		
033:001	1.00	07:29:03	-0.31	-0.48		
034:001	1.00	07:30:20	2.85	-0.48		
035:001	1.00	07:31:36	-0.31	5.76		
036:001	1.00	07:32:52	-0.31	1.92		
037:001	1.00	07:34:09	-0.31	-0.48		
038:001	1.00	07:35:25	-0.31	1.92		
039:001	1.00	07:36:41	-0.31	-0.48		
040:001	1.00	07:37:58	-0.31	-2.90		
041:001	1.00	07:39:14	-0.31	-0.48		
042:001	1.00	07:40:30	2.85	-2.90		
043:001	1.00	07:41:47	-0.31	-0.48		
044:001	1.00	07:43:03	-0.31	1.92		
045:001	1.00	07:44:19	-0.31	-0.48		
046:001	1.00	07:45:36	-0.31	-2.90		
047:001	1.00	07:46:52	-0.31	-2.90		
048:001	1.00	07:48:09	-0.31	1.92		
049:001	1.00	07:49:25	1.85	4.33		
050:001	1.00	07:50:41	-0.31	1.92		
051:001	1.00	07:51:58	-0.31	-0.48		
052:001	1.00	07:53:14	-0.31	11.49		
053:001	1.00	07:54:30	-0.31	-0.48		
054:001	1.00	07:55:47	-0.31	1.92		
055:001	1.00	07:57:03	-0.31	0.10		
056:001	1.00	07:58:19	-0.31	-0.48		
057:001	1.00	07:59:36	-0.31	1.92		
058:001	1.00	08:00:52	-0.31	-1.90		
059:001	1.00	08:02:09	1.85	4.33		
060:001	1.00	08:03:25	-0.31	1.92		
061:001	1.00	08:04:42	-0.31	1.92		
062:001	1.00	08:05:58	-0.31	-2.90		
063:001	1.00	08:07:14	-0.31	-0.48		
064:001	1.00	08:08:31	-0.31	-0.48		
065:001	1.00	08:09:47	-0.31	-0.48		
066:001	1.00	08:11:03	2.85	1.92		
067:001	1.00	08:12:20	-0.31	1.92		
068:001	1.00	08:13:36	-0.31	-1.90		
069:001	1.00	08:14:53	-0.31	3.75		
070:001	1.00	08:16:09	-0.31	-0.48		
071:001	1.00	08:17:25	3.71	1.92		

Supervised _____

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#
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[illegible] [illegible] SI SAMPLE ACTIVITY 16Jul2004
[illegible] [illegible] 08:48:31
[illegible] Tousset Procedure: Pouring GRP 0.15

SAMPLE ALPHA ACTION	TIME MIN	SAMPLE START	ALPHA ODM	BETA ODM	ALPHA ACTION	BETA ACTION
970:A01	1.00	08:19:44	-0.31	1.93		
971:A01	1.00	08:20:00	-0.31	4.35		
972:B01	1.00	08:21:16	-0.31	4.35		
973:A01	1.00	08:22:33	2.55	1.97		
974:A01	1.00	08:25:49	-0.31	-2.90		
975:B01	1.00	08:25:06	-0.31	-2.90		
976:A01	1.00	08:26:23	-0.31	4.35		
977:A01	1.00	08:27:39	2.55	4.35		
978:B01	1.00	08:28:55	-0.31	-0.48		
979:B01	1.00	08:30:12	-0.31	11.60		
980:B01	1.00	08:31:28	-0.31	-0.48		
981:B01	1.00	08:32:45	-0.31	-2.90		
982:B01	1.00	08:34:01	-0.31	-0.48		
983:B01	1.00	08:35:17	-0.31	1.93		
984:B01	1.00	08:36:34	-0.31	-0.48		
985:B01	1.00	08:37:50	-0.31	6.76		
986:B01	1.00	08:39:06	-0.31	1.93		
987:B01	1.00	08:40:23	2.55	-2.90		
988:B01	1.00	08:41:39	-0.31	-0.48		
989:B01	1.00	08:42:56	-0.31	-2.90		
990:B01	1.00	08:44:12	-0.31	-2.90		
991:B01	1.00	08:45:28	-0.31	1.93		
992:B01	1.00	08:46:45	-0.31	-2.90		
993:B01	1.00	08:48:01	-0.31	6.76		
994:B01	1.00	08:49:18	-0.31	4.35		
995:B01	1.00	08:50:34	-0.31	-0.48		
996:B01	1.00	08:51:50	-0.31	4.35		
999:B01	1.00	08:53:07	-0.31	1.93		
000:B01	1.00	08:54:23	2.55	-2.90		

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Tennelec Series 5E — SAMPLE ACTIVITY — [illegible]
Unit ID: 7B42737 — 09:00:04
User: Guest — Procedure: Routine — CAL 0.15

Mode: [illegible] Time Min: 1.00 Smpl Pol: 1 Grp Pol: 00:00:
Bkg Sub: Auto/Sys Eff Calc: Auto/Sys Act Calc: Yes/On Sol Corr: No/Off
α Preset: 90000000 β Preset: 90000000 Wk Time: 0.00 Wk Cts: 0
αLLD %FS: 0.25 βLLD %FS: 70.00 αULD %FS: 70.10 βULD %FS: 100.00

α-β Plat: C1-36 β 07Mar2005 1440
α Bkg: BkgBlank 07Mar2005 0.10 ± 0.10
β Bkg: BkgBlank 07Mar2005 1.20 ± 0.34
α Eff: Pu 9e8a 07Mar2005 [illegible]
β Eff: C1-36 β 07Mar2005 [illegible]
Xa: 1.00 ± 0.00 α MDA: 12 [illegible]
α Action: 10.00 0.00 0.00 0.00 dpm
Xb 1.00 ± 0.00 β MDA: 16 [illegible]
β Action: 1000.00 0.00 0.00 0.00 dpm

DT 7-16-05

Sample Num:Rpt	Time of Day	Sample ID	Alpha Conc dpm	Beta Conc dpm	Alpha Action	Beta Action
001:001	1.00	09:02:15	-0.31	-0.48		
002:001	1.00	09:01:27	-0.31	0.35		
003:001	1.00	09:01:40	-0.31	-0.96		
004:001	1.00	09:04:05	-0.31	-0.48		
005:001	1.00	09:04:27	-0.31	1.93		
006:001	1.00	09:04:52	-0.31	1.45		
007:001	1.00	09:07:55	-0.31	1.93		
008:001	1.00	09:09:11	-0.31	1.93		
009:001	1.00	09:10:27	-0.31	-0.96		
010:001	1.00	09:11:43	-0.31	-0.48		
011:001	1.00	09:13:00	-0.31	-2.90		
012:001	1.00	09:14:17	-0.31	1.93		
013:001	1.00	09:15:33	-0.31	1.93		
014:001	1.00	09:16:50	-0.31	4.35		
015:001	1.00	09:18:06	-0.31	4.35		
016:001	1.00	09:19:23	-0.31	-0.48		
017:001	1.00	09:20:39	-0.31	-2.90		
018:001	1.00	09:21:55	-0.31	-0.48		
019:001	1.00	09:23:11	-0.31	-0.48		
020:001	1.00	09:24:28	-0.31	6.71		
021:001	1.00	09:25:44	-0.31	-0.48		
022:001	1.00	09:27:00	-0.31	1.93		
023:001	1.00	09:28:17	-0.31	-0.48		
024:001	1.00	09:29:33	-0.31	1.93		
025:001	1.00	09:30:49	-0.31	-2.90		
026:001	1.00	09:32:06	-0.31	-0.48		
027:001	1.00	09:33:22	-0.31	-0.48		
028:001	1.00	09:34:39	-0.31	1.93		

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Tennelec Series 5E | SAMPLE ACTIVITY | 15Jul2005
Unit ID: 7842737 | | 09:00:04
User: Guest | Procedure: Routine | CRD 0.15

SAMPLE NUM.RPT	TIME MIN	SAMPLE START	ALPHA dpm	BETA dpm	ALPHA ACTION	BETA ACTION
029:001	1.00	09:35:56	-0.31	-2.90		
030:001	1.00	09:37:13	-0.31	-0.48		
031:001	1.00	09:38:29	-0.31	1.93		
032:001	1.00	09:39:46	-0.31	-2.90		
033:001	1.00	09:41:02	2.85	4.35		
034:001	1.00	09:42:18	-0.31	-0.48		
035:001	1.00	09:43:34	2.85	-0.48		
036:001	1.00	09:44:51	-0.31	-0.48		
037:001	1.00	09:46:07	-0.31	4.35		
038:001	1.00	09:47:24	-0.31	1.93		
039:001	1.00	09:48:40	-0.31	-0.48		
040:001	1.00	09:49:57	-0.31	-0.48		
041:001	1.00	09:51:13	-0.31	6.78		
042:001	1.00	09:52:29	-0.31	-2.90		
043:001	1.00	09:53:46	-0.31	-0.48		
044:001	1.00	09:55:02	-0.31	-0.48		
045:001	1.00	09:56:19	-0.31	1.93		
046:001	1.00	09:57:35	-0.31	-2.90		
047:001	1.00	09:58:52	-0.31	-0.48		
048:001	1.00	10:00:09	-0.31	4.35		
049:001	1.00	10:01:25	-0.31	-0.48		
050:001	1.00	10:02:42	-0.31	-0.48		
051:001	1.00	10:03:58	-0.31	-0.48		
052:001	1.00	10:05:15	-0.31	1.93		
053:001	1.00	10:06:31	-0.31	-0.48		
054:001	1.00	10:07:50	-0.31	1.93		
055:001	1.00	10:09:08	2.85	0.48		
056:001	1.00	10:10:27	-0.31	-0.48		
057:001	1.00	10:11:45	-0.31	-2.90		
058:001	1.00	10:13:03	-0.31	-0.48		
059:001	1.00	10:14:22	-0.31	-0.48		
060:001	1.00	10:15:40	-0.31	-0.48		
061:001	1.00	10:16:58	-0.31	-0.48		
062:001	1.00	10:18:17	-0.31	-0.48		
063:001	1.00	10:19:35	-0.31	-0.48		
064:001	1.00	10:20:53	-0.31	-0.48		
065:001	1.00	10:22:12	-0.31	-0.48		
066:001	1.00	10:23:30	-0.31	-0.48		
067:001	1.00	10:24:48	-0.31	-0.48		
068:001	1.00	10:26:07	-0.31	-0.48		
069:001	1.00	10:27:25	-0.31	-0.48		
070:001	1.00	10:28:43	-0.31	-0.48		
071:001	1.00	10:30:02	-0.31	-0.48		

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Reviewed: _____ Date: _____

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SAMPLE NUM:SET	TIME	CONDUCT	ATEMP	DTEMP	ALARM OPTION	RPT# ACTION
071:001	1.00	10:36:48	-0.31	1.92		
072:001	1.00	10:38:04	-0.31	-0.48		
073:001	1.00	10:39:21	2.86	-0.48		
074:001	1.00	10:34:38	-0.31	-0.48		
075:001	1.00	10:35:55	-0.31	-0.48		
076:001	1.00	10:37:11	-0.31	1.92		
077:001	1.00	10:38:28	-0.31	11.60		
078:001	1.00	10:39:44	-0.31	1.92		
079:001	1.00	10:41:01	-0.31	6.76		
080:001	1.00	10:42:18	-0.31	6.76		
081:001	1.00	10:43:34	-0.31	-0.48		
082:001	1.00	10:44:51	-0.31	1.92		
083:001	1.00	10:46:07	-0.31	6.76		
084:001	1.00	10:47:24	-0.31	-2.90		
085:001	1.00	10:48:41	-0.31	-0.48		
086:001	1.00	10:49:57	-0.31	-2.90		
087:001	1.00	10:51:13	2.86	-2.90		
088:001	1.00	10:52:29	-0.31	4.35		
089:001	1.00	10:53:46	-0.31	-2.90		
090:001	1.00	10:55:03	-0.31	1.93		
091:001	1.00	10:56:19	-0.31	-0.48		
092:001	1.00	10:57:35	-0.31	-0.48		
093:001	1.00	10:58:52	-0.31	-0.48		
094:001	1.00	11:00:08	2.86	-2.90		
095:001	1.00	11:01:24	-0.31	1.93		
096:001	1.00	11:02:41	-0.31	1.93		
097:001	1.00	11:03:57	-0.31	9.18		
098:001	1.00	11:05:14	-0.31	-2.90		
099:001	1.00	11:06:30	-0.31	4.35		
100:001	1.00	11:07:47	-0.31	1.93		

Page 3/Done

Authorized: _____

Sonwet #05-ER-A25-718

PAGE 32 of 34

Tennelec Series 5E — SAMPLE ACTIVITY — 1eJul2005
Unit ID: 7842737 — 11:13:56
User: Guest — Procedure: Routine — 050 8.15

Mode:	αβ	Time Min:	1.00	Smpl Rpt:	1	Grp Rpt:	001:001
Bkg Sub:	Auto/Sys	Eff Calc:	Auto/Sys	Act Calc:	Yes/On	Spl Corr:	Act/Eff
α Preset:	90000000	β Preset:	90000000	Wt Time:	0.00	Wt Lic:	0
βLLD %FS:	0.25	βULD %FS:	70.00	αULD %FS:	70.00	αULD %FS:	100.00

α+β Plat:	Cl-36 1	07Mar2005	1440			
α Bkg:	BkgBlank	07Mar2005	0.10	±	0.10	
β Bkg:	BkgBlank	07Mar2005	1.20	±	0.34	
α Eff:	Pu 9n84	07Mar2005	31.85	±	1.55E-01	
β Eff:	Cl-36 1	07Mar2005	4.37	±	2.53E-01	
%α:	1.00	±	0.00	± MDA:	12	cpm
α Action:	20.00		0.00	±	0.00	cpm
%β:	1.00	±	1.00	β MDA:	16	cpm
β Action:	1000.00		0.00	±	0.00	cpm

JT 7-16-05

SAMPLE	TIME	SAMPLE	ALPHA	BETA	ALPHA	BETA
ID/PLAT	MIN	EFF%	CPM	CPM	ACTION	ACTION
001:001	1.00	11:14:38	-0.31	-0.34		
002:001	1.00	11:15:39	-0.31	-0.40		
003:001	1.00	11:16:40	-0.31	-0.46		
004:001	1.00	11:17:41	-0.31	4.35		
005:001	1.00	11:18:42	-0.31	1.37		
006:001	1.00	11:19:43	-0.31	-0.40		
007:001	1.00	11:20:44	-0.31	1.32		
008:001	1.00	11:21:45	-0.31	0.46		
009:001	1.00	11:22:46	-0.31	-0.43		
010:001	1.00	11:23:47	-0.31	-0.46		
011:001	1.00	11:24:48	-0.31	1.43		
012:001	1.00	11:25:49	-0.31	4.35		
013:001	1.00	11:26:50	-0.31	15.83		
014:001	1.00	11:27:51	-0.31	0.35		
015:001	1.00	11:28:52	-0.31	-2.90		
016:001	1.00	11:29:53	-0.31	1.43		
017:001	1.00	11:30:54	-0.31	-1.90		
018:001	1.00	11:31:55	-0.31	-0.40		
019:001	1.00	11:32:56	-0.31	1.35		
020:001	1.00	11:33:57	-0.31	-0.46		
021:001	1.00	11:34:58	-0.31	4.35		
022:001	1.00	11:35:59	-0.31	-1.90		
023:001	1.00	11:37:00	-0.31	-0.43		
024:001	1.00	11:38:01	-0.31	-2.90		
025:001	1.00	11:39:02	-0.31	-1.90		
026:001	1.00	11:40:03	-0.31	1.40		
027:001	1.00	11:41:04	-0.31	-0.43		
028:001	1.00	11:42:05	-0.31	4.35		

Page 1/More — Authorized _____

Sonde # 05-EEL-125-718
PAGE 33 of 34

Tennelec Series 5E — SAMPLE ACTIVITY — 16Jul2005
Unit ID. 7640737 — 11:13:56
User: Guest — Procedure: Routine — CRC 0.1E

SAMPLE NUM:SBT	TIME MIN	SAMPLE START	ALPHA dpm	BETA dpm	ALPHA ACTION	BETA ACTION
029:001	1.00	11:49:59	-0.31	-2.90		
030:001	1.00	11:51:14	-0.31	1.93		
031:001	1.00	11:52.33	-0.31	-2.90		

age 1/Done — Authorized: [signature]

Description/Map/Drawing/Picture/Comments

N

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Pad
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	A
62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	B
93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	C
												112	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	D
																		125	124	123	122	121	120	119	118	117	116	115	114	113	E
																		138	137	136	135	134	133	132	131	130	129	128	127	126	F
																		151	150	149	148	147	146	145	144	143	142	141	140	139	G
																		164	163	162	161	160	159	158	157	156	155	154	153	152	H
												183	182	181	180	179	178	177	176	175	174	173	172	171	170	169	168	167	166	165	I
												202	201	200	199	198	197	196	195	194	193	192	191	190	189	188	187	186	185	184	J
												221	220	219	218	217	216	215	214	213	212	211	210	209	208	207	206	205	204	203	K
												240	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224	223	222	L
												259	258	257	256	255	254	253	252	251	250	249	248	247	246	245	244	243	242	241	M
												278	277	276	275	274	273	272	271	270	269	268	267	266	265	264	263	262	261	260	N
												297	296	295	294	293	292	291	290	289	288	287	286	285	284	283	282	281	280	279	O
												316	315	314	313	312	311	310	309	308	307	306	305	304	303	302	301	300	299	298	P
												335	334	333	332	331	330	329	328	327	326	325	324	323	322	321	320	319	318	317	Q
												354	353	352	351	350	349	348	347	346	345	344	343	342	341	340	339	338	337	336	R
												373	372	371	370	369	368	367	366	365	364	363	362	361	360	359	358	357	356	355	S
												392	391	390	389	388	387	386	385	384	383	382	381	380	379	378	377	376	375	374	T
												411	410	409	408	407	406	405	404	403	402	401	400	399	398	397	396	395	394	393	U
												430	429	428	427	426	425	424	423	422	421	420	419	418	417	416	415	414	413	412	V

LEGEND

O = Swipe * ___/___ = Contact / 30cm γ = gamma β = beta n = neutron x-x-x-x = Boundary Δ = LAW

APPENDIX D

WASTE DISPOSITION DOCUMENTATION

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Bechtel Nevada

NTS Landfill Load Verification

2/16/05

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 9 LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: Robert K. Murdock Phone Number: 295-5968

Location / Origin: Area 25 CAU 115 Test Cell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☐ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers	☐ Asphalt	☐ Metal	☐ Wood	☐ Soil
☐ Rubber (excluding tires)	☐ Demolition debris	☐ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)
☐ Cement & concrete	☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)					

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Electrical Rectifier	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: N/A *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K. Murdock

Signature: Robert K. Murdock Date: 2-14-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: John F Barron DATE: 2/14/05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 11,400 Signature of Certifier: Robert K. Murdock

Retention Code: ENV 6.b

BN-0918 (04/03)

James S.
G82 0709A TRK E104326 TRL (1)

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

6/1/05

SWO USE (Circle One Area) AREA 23 6 9 LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A (Atlas)

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Exempt 7/11/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled my ***knowledge, does not contain radiological materials.***

To the best of my knowledge, the waste described above contains this ***site. I have verified this through the waste characterization method*** ed ***prohibited and allowable waste items.***

Radiation Survey Release for Waste Disposal
RCT Initials
☐ This container/load is free of external radioactive contamination.
☐ This container/load is exempt from survey due to process knowledge and origin.
☑ This container/load is free of radioactive contamination based on radioanalysis.
SIGNATURE: _____ DATE: 6/1-05
BN-0646 (09/99)

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 27500 Signature of Certifier: James A. Stafford

Retention Code: ENV 6.b BN-0918 (04/03)

steve c.
G82 0730 A TRK (2) E100034 TRL

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krugic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS RZW 7/11/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers			
☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ DH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 20000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

~~Blaine~~ Warren M.
GB20731A TRK E104817 TRL (3)

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A Access

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Access ☐ Non-Putrescible	☐ Putrescible ☐ Asbestos Containing Material	☑ FFACO-onsite ☐ FFACO-offsite	☐ WAC Exception ☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Insulation (non-Asbestosform)	☑ Demolition debris ☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge ☐ Rags		☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Was knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only site. I have verified this through the waste characterization method iden prohibited and allowable waste items.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/99)

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 26,000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

IR - GBL-U0001
Trk # E100035 James S.

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Test Cell A Area 25 Cell 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Lego 7110	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	☑ Cement & concrete
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)				☐ Insulation (non-Asbestosform)		

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 5-31-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J Hough DATE: 5-31-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 16,000 Signature of Certifier: L Johnson

Retention Code: ENV 6.b

BN-0918 (04/03)

G820699A TRK

E100037

(9)

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: B&J Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☑ Rocks / unaltered geologic materials	☐ Empty containers	☐ Asphalt	☑ Metal	☑ Wood
☑ Soil	☐ Rubber (excluding tires)	☑ Demolition debris	☑ Plastic	☑ Wire	☐ Cable
☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete			

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☑ Animal Carcasses

☑ Asbestos: ☑ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☑ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 24,000 Signature of Certifier: _____

G820709A TRK E 104326 TR1 (10)

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krusic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A. CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Key 5/11/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)				☐ Insulation (non-Asbestosform)	☑ Cement & concrete	

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Ma knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those site. I have verified this through the waste characterization method identified prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- JLL ☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph L Kelly DATE: 6/1/05

BN-0648 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 32,400 Signature of Certifier: James L Stuteford

Retention Code: ENV 6.b

BN-0918 (04/03)

G82 0731 A TRK (13) E104817 TR1

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krupic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☐ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris
				☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste M knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only thos site. I have verified this through the waste characterization method identifiec prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 27,000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

vonn

G82 06 88A
~~G82 0731A TRK~~

(15)

E 100035
~~E 104817 TRK~~

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: B.N. Construction (Mike Kruger) Phone Number: 5-7396

Location / Origin: Area 25 - Test cell A. Cactus

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only th site. I have verified this through the waste characterization method identifi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JL This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: [signature] DATE: 6-1-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale ~~or estimate~~): 7,500 Signature of Certifier: [signature]

Retention Code: ENV 6.b

BN-0918 (04/03)

~~662~~ G820730A E100034 JRL 1:42

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (mike trumic) Phone Number: 5-7396

Location / Origin: Area 25 Testcell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	☑ Cement & concrete
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)				☐ Insulation (non-Asbestosform)		

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste M knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only thos site. I have verified this through the waste characterization method identifie prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

JLR ☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph O'Kelly DATE: 6/1/05

BN-8646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 25000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

G82 0709A TRK E104326 TRL (2) 2:47

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

6/2/05

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Miles Krunic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified at prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-7-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 24.00 Signature of Certifier: James A Madrigal

Retention Code: ENV 6.b

BN-0918 (04/03)

Warm Mix (5) 2615

G820699A TRK E100037 TRL

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krupa) Phone Number: 5-7396

Location / Origin: Area 25 - Test cell A Cell 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials
☐ Empty containers	☑ Demolition debris	☑ Plastic	☑ Wire	☐ Cable	☐ Cloth
☐ Rubber (excluding tires)	☐ Insulation (non-Asbestosform)	☑ Cement & concrete	☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)		

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Wi ***ıy knowledge, does not contain radiological materials.***

To the best of my knowledge, the waste described above contains onl ***is site. I have verified this through the waste characterization method ide*** ***prohibited and allowable waste items.***

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/99)

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 22000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

J. L. Johnson DONUT "US-ER" PAGE 180

PAGE 2 OR 2

G82 0688A TRK E100035 3:55

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7398.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krumm) Phone Number: 5-7396

Location / Origin: Test Cell A Area 6 Camp

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill: ☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only th site. I have verified this through the waste characterization method identi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JL This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J. L. Johnson DATE: 6-7-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 29,000 Signature of Certifier: J. L. Johnson

Retention Code: ENV 6.b

BN-0918 (04/03)

STEVE CHIPMAN (5) SURVEY "05-ER-ALS-434
G-82 0730 A TRK E1G00034 TRL PAGE 3 OF 3

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7998.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: B N Construction (Mike Krusic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU 5

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground Tanks
☐ Hydrocarbons (contact SWO)	☐ Other _____	

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 23,000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

G820731 A TRK (9) SURVEY TOS-ER-425-440 E104817 TRL PAGE 3 OF 3

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krusic) Phone Number: 5-7396

Location / Origin: A25 Test Cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manage knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those mat site. I have verified this through the waste characterization method identified abov prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-01-05

Radiation Survey Release for Waste Disposa

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-1-05

BN-0646 (09/9

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 32,200 Signature of Certifier: James A Shadford

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver Name: Warren Morris Survey # 05-ER-A25-446 (15)
Truck: G82-0699A Trailer: E100037

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krmpic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris
				☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste M knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only thos site. I have verified this through the waste characterization method identifie prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-02-05

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- JLR This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph L Reilly DATE: 6/2/05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 30,000 Signature of Certifier:

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver Name: James Stedeford Time: 1425 (2)
Truck # G82-0709A Trailer # E104326

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2) 6/6/05

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Krupica) Phone Number: 5-7396

Location / Origin: Area 25 - Test Cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Rad Rules	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill: ☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Asphalt ☑ Metal ☑ Wood ☐ Soil ☐ Rubber (excluding tires) ☑ Demolition debris

☑ Plastic ☑ Wire ☐ Cable ☐ Cloth ☐ Insulation (non-Asbestosform) ☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos ☐ Drained automobiles and military vehicles ☐ Solid fractions from sand/oil/water separators

☐ Light ballasts (contact SWO) ☐ Drained fuel filters (gas & diesel) ☐ Deconned Underground and Above Ground

☐ Hydrocarbons (contact SWO) ☐ Other _____ ☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge ☐ Rags ☐ Drained fuel filters (gas & diesel) ☐ Crushed non-terne plated oil filters

☐ Plants ☐ Soil ☐ Sludge from sand/oil/water separators ☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified abo prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-02-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain a require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: [signature] DATE: 6-2-05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 26500 Signature of Certifier: Jon S Stedford

Retention Code: ENV 6.b BN-0918 (04/03)

Driver Name: Jt Jones

Survey #: 05-GK-MAD-726

Truck G82-069814

Trailer: E100035

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Krug's) Phone Number: 5-7376

Location / Origin: Area 25 - Test cell A (ALICE)

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS 1/24/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only the site. I have verified this through the waste characterization method identifi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-02-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

JLR This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph Reilly DATE: 6/2/05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or ~~estimate~~): 27000 Signature of Certifier:

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver Name: 0730A STEVE CHIPMAN Survey # 05-BR-A25-451 (4)
Truck # G82-~~0703A~~ JR 6/2/05 Trailer # E100034 Time: 1450

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7398.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krupa) Phone Number: 5-7396

Location / Origin: Area 25 ~~RT~~ Test cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Rad 7/1/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	
☐ Insulation (non-Asbestosform)	☑ Cement & concrete					

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Wast knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only ti site. I have verified this through the waste characterization method identi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-02-05

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- JLK ☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph L Kelly DATE: 6/2/05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 25000 Signature of Certifier: [signature]

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver: / AFRICIA L. THOMAS

Truck: G82-0731 A Trailer: E104817 0830

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krusic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only thc site. I have verified this through the waste characterization method identifi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 0-6-06-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

JLK ☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph L Reilly DATE: 4/6/05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 28,500 Signature of Certifier: Fabricia Thomas

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver: Warren Morris

Truck: G82-0699A Trailer E100037 9:10

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Krugic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☒ Rocks / unaltered geologic materials	☐ Empty containers			
☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☐ Wire	☐ Cable	☒ Cloth	☒ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☒ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☒ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☒ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Wast knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only t site. I have verified this through the waste characterization method ident prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-06-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JLR This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: Joseph L Reil DATE: 6/6/05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 20,000 Signature of Certifier: [signature]

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver: [illegible] (RL)

Truck: G82-0688A Trailer: E100035 11:30

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A Cell 5

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS (Cell 5/11/05)	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☐ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)				☐ Insulation (non-Asbestosform)	☑ Cement & concrete	

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground Tanks
☐ Hydrocarbons (contact SWO)	☐ Other _____	

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Was knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only site. I have verified this through the waste characterization method ider prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-06-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ DF This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: [signature] DATE: 6-6-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 7.00 Signature of Certifier: [signature]

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver: Jim Stodelard
Truck: 682-0709A
Trailer: E104326
(2)
3:00

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

6/7/05

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krugic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A Cell 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS Rad 7/14/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste Manag knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-06-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-6-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 22,400 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver: PATRICIA L. THOMAS

Truck: G82-0731A

Trailer: E104817

PAGE 3 OF 3

3:45

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruger) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS RCW 7/14/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☐ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	☑ Cement & concrete
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)				☐ Insulation (non-Asbestosform)		

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste M knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only thos site. I have verified this through the waste characterization method identifiec prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-06-05

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- ☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: _____

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 23,500 Signature of Certifier: Patricia L Thomas

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver: Aaron Morris
Truck: G82-0699A
Trailer: F100037
4
8:00

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krugic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rocks / unaltered geologic materials	☐ Empty containers
☐ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris
				☐ Insulation (non-Asbestosform)	☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ ***(If initialed, no radiological clearance is necessary.)***

The above mentioned waste was generated outside of a Controlled Waste knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only th site. I have verified this through the waste characterization method identi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-07-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-7-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 20,000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver J L Johnson (2)
Truck: G82-0688A Trailer: E1000 35 9130

Bechtel Nevada **NTS Landfill Load Verification**

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7893.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krupicka) Phone Number: 5-2396

Location / Origin: Area 25 TCA (Cell 11)

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS RAC 2/16/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manag knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified abc prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-07-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ DT This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 6-7-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 21,520 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0516 (04/03)

Driver J.M Steedford
Truck G82-0209A
Trailer: E 104326 PAGE 3 OF 3
SOW# 05-ER-A25-504

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Krupic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU 115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS 7/11/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers	☐ Asphalt	☑ Metal	☐ Wood
☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris	☐ Plastic	☑ Wire	☐ Cable
☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Cement & concrete			

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Was knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only site. I have verified this through the waste characterization method iden prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-07-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE 6-7-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 92000 Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0518 (04/03)

Driver: J. L. Johnston

Truck: 682-0231A Trailer 104817 11:45

Bechtel Nevada **NTS Landfill Load Verification**

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BV Construction (Mike Krupic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS RCO 7/1/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses; Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☐ Plastic	☑ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Insulation (non-Asbestosform)	☑ Demolition debris
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)						☐ Cement & concrete

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified at prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 06-07-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J. Hough DATE: 6-7-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 29,500 Signature of Certifier: J. L. Johnston

Retention Code: ENV 6.b

BN-0918 (04/03)

Driver Warren Morris
Truck: G62-0694A

Sundt #05-ER-A25-SLD Page 3 of 3 5th

Trailer 100037

1320

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7893.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (M. Le Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste A knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only tho site. I have verified this through the waste characterization method identifie prohibited and allowable waste items.

Print Name: Brian K Konrad

Signature: _____ Date: 6/7/05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: _____

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 20,000 1,500 TB Signature of Certifier: _____

Retention Code: ENV 6.b

BN-0918 (04/03)

(4)

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

2-11-05

SWO USE (Circle One Area) AREA 23 6 9 LANDFI

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115 GS

Waste Category: (check one) ☐ Commercial ☑ Industrial

Waste Type: (check one) ☑ NTS ☐ Putrescible ☑ FFACO-onsite ☐ WAC Exception ☐ Non-Putrescible ☐ Asbestos Containing Material ☐ FFACO-offsite GS ☐ Historic DOE/NV

Pollution Prevention Category: (check one) OK ~~☐ Environmental management~~ GS ~~☐ Defense Projects~~ ☐ YMP

Pollution Prevention Category: (check one) ☑ Clean-Up GS 2/11/05 ☐ Routine

Method of Characterization: (check one) ☑ Sampling & Analysis ☑ Process Knowledge ☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: *Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.*

Acceptable waste at any NTS landfill:

☐ Asphalt ☐ Metal ☐ Wood ☑ Soil ☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers
☑ Plastic ☐ Wire ☐ Cable ☐ Cloth ☐ Rubber (excluding tires) ☐ Demolition debris
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.) ☐ Insulation (non-Asbestosform) ☐ Cement & concrete

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos ☐ Drained automobiles and military vehicles ☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO) ☐ Drained fuel filters (gas & diesel) ☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO) ☑ Other Perlite ☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge ☐ Rags ☐ Drained fuel filters (gas & diesel) ☐ Crushed non-terne plated oil filters
☐ Plants ☐ Soil ☐ Sludge from sand/oil/water separators ☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manag knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified abc prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 02-11-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.
☐ This container/load is exempt from survey due to process knowledge and origin.
☑ RT This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 2-11-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 15,000 Signature of Certifier: Kelly Kayser

Retention Code: ENV 6.b

BN-0818 (04/03)

(5)

Bechtel Nevada **NTS Landfill Load Verification**

(Waste definitions are available on page 2) 7-12-05

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFIL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BJ Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115 095 7/13/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Rocks / unaltered geologic materials	☒ Empty containers	
☑ Plastic	☐ Wire	☒ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Demolition debris	
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)				☐ Insulation (non-Asbestosform)	☐ Cement & concrete	

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☒ Solid fractions from sand/oil/water separators
☒ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☒ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☒ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☒ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified abo prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 07-12-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☒ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: [signature] DATE: 7-12-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 60.00 Signature of Certifier: Keith Kagay

Retention Code: ENV 6.b

BN-0518 (04/03)

Roll off - 009 @ 11:20

Truck - E106400

04/26/2005 15:26 17022557582

10 14827

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2) 7-19-05

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU 115 COC 7/20/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers	☐ Asphalt	☐ Metal	☐ Wood	☐ Soil
☐ Rubber (excluding tires)	☐ Demolition debris	☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)
☐ Cement & concrete						

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those site. I have verified this through the waste characterization method identified prohibited and allowable waste items.

Print Name: Robert Murdock

Signature: Robert Murdock Date: 7-19-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 7-19-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radionuclides and do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 3020 Signature of Certifier: Keith Kayes

Retention Code: ENV 6.b BN-0918 (04/03)

Trailer - 009 @ 11:20

Truck - E106400

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

7-20-05

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BJ Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☐ Empty containers
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Demolition debris
					☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manage knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those mat site. I have verified this through the waste characterization method identified abov prohibited and allowable waste items.

Print Name: Robert V Murdock

Signature: Robert V Murdock Date: 07-20-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 7-20-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 8,280 Signature of Certifier: Keith Kaya

Retention Code: ENV 6.b

BN-0918 (04/03)

TRUCK = E106400 @ 9:00

TRAILER = #2

(5)

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: B.V. Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☑ Soil	☐ Rubber (excluding tires)	☑ Demolition debris
☐ Plastic	☑ Wire	☑ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☑ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only site. I have verified this through the waste characterization method ider prohibited and allowable waste items.

Print Name: Robert V Murdock

Signature: Robert V Murdock Date: 07-20-05

Note: Food waste, office trash and/or animal carcasses are considered not t require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ DL This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 7-20-05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 20,000 Signature of Certifier: _____

Retention Code: ENV 6.b BN-0516 (04/03)

@ 11:40

Trailer - E102925

Truck - G820688A

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2) 7-21-05 (4)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: B.V. Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☑ Metal	☑ Wood	☑ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☐ Plastic	☑ Wire	☑ Cable	☐ Cloth	☐ Rubber (excluding tires)	☑ Demolition debris	☑ Cement & concrete
				☐ Insulation (non-Asbestosform)		

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☐ Other _____	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only th site. I have verified this through the waste characterization method identi prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 07-21-05

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- ☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J Hough DATE: 7-21-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 10,000 Signature of Certifier: Robert D White

Retention Code: ENV 6.b

BN-0818 (04/03)

Truck G82068849 @ 9:50

Trailer E102925

(1)

Bechtel Nevada **NTS Landfill Load Verification** 7-27-05

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BU Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115 RS 7/27/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Insulation (non-Asbestosform)	☐ Demolition debris
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)						☐ Cement & concrete

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manag knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified abo prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 07-25-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J. Hoag DATE: 7-25-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 7600 Signature of Certifier: Patricia F. Thomas

Retention Code: ENV 6.b BN-0918 (04/03)

Truck - G8206884 @ 2:30

Trailer - E102925

04/28/2005 15:20 [illegible]

(2)

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BJ Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A (CAU-115 OS 7/27/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☐ Empty containers
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Demolition debris
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)					☐ Cement & concrete

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those materials that are allowed for disposal at this site. I have verified this through the waste characterization method identified above and a review of the above-mentioned prohibited and allowable waste items.

Print Name: Robert K. Murdock

Signature: Robert K Murdock Date: 07-26-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain add... require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: [signature] DATE: 7/26/05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 6,000 Signature of Certifier: [signature]

Retention Code: ENV 6.b

BN-[illegible]18 (04/03)

Trailer - 9

@ 8:35

Truck - E106400

1 1485

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Insulation (non-Asbestosform)	☐ Demolition debris
						☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill:

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

☐ Other _____

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 04-27-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- ☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J Houghton DATE: 4-27-05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 5,840 Signature of Certifier: Keith Kaysay

Retention Code: ENV 6.0 BN-0518 (04/03)

Trailer - #2

@ 3:00

Truck - E106400

(8)

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

8-2-05

SWO USE (Circle One Area) AREA 23 6 (9) **LANDFILL**

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BJ Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS KMK 9/21/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers	☐ Asphalt	☐ Metal	☐ Wood
☐ Soil	☐ Rubber (excluding tires)	☐ Demolition debris	☑ Plastic	☐ Wire	☐ Cable
☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Cement & concrete			

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those n site. I have verified this through the waste characterization method identified a prohibited and allowable waste items.

Print Name: Brian Konrad

Signature: _____ Date: 8/2/05

Radiation Survey Release for Waste Disposal

RCT Initials

- ☐ This container/load is free of external radioactive contamination.
- ☐ This container/load is exempt from survey due to process knowledge and origin.
- ☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 8-2-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 8,080 Signature of Certifier: Keith Kenyon

Retention Code: ENV 6.b

BN-0516 (04/03)

04/26/2005 15:26 [illegible]

#14888

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2) 4-17-05

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115 BJS 8/18/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Demolition debris
				☐ Insulation (non-Asbestosform)	☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters	
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million	

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Mana knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those m site. I have verified this through the waste characterization method identified ab prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 08-17-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J Houghton DATE: 8-17-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 16,420 Signature of Certifier: Keith Kayser

Retention Code: ENV 6.0 BN-0918 (04/03)

E107170 - Truck

33 - Trailer

(0) #1489

Bechtel Nevada — NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115 CAS 8/18/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses; Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Asphalt ☐ Metal ☐ Wood ☐ Soil ☐ Rubber (excluding tires) ☐ Demolition debris

☑ Plastic ☐ Wire ☐ Cable ☐ Cloth ☐ Insulation (non-Asbestosform) ☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos ☐ Drained automobiles and military vehicles ☐ Solid fractions from sand/oil/water separators

☐ Light ballasts (contact SWO) ☐ Drained fuel filters (gas & diesel) ☐ Deconned Underground and Above-Ground

☐ Hydrocarbons (contact SWO) ☑ Other Perlite ☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge ☐ Rags ☐ Drained fuel filters (gas & diesel) ☐ Crushed non-terne plated oil filters

☐ Plants ☐ Soil ☐ Sludge from sand/oil/water separators ☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manage knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those mati site. I have verified this through the waste characterization method identified abov prohibited and allowable waste items.

Print Name: Robert K. Murdock

Signature: Robert K Murdock Date: 08-17-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J Houghton DATE: 8-17-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 13580 Signature of Certifier: Keith Kanzy

Retention Code: ENV 6.b

BN-0516 (04/03)

Truck - E107170

Trailer - 08

2

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2) 8-23-05

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU 115 DS 8/25/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Rubber (excluding tires)	☐ Insulation (non-Asbestosform)	☐ Demolition debris
						☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those mat site. I have verified this through the waste characterization method identified abo prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 08-23-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ JH This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: J Hoyos DATE: 8-23-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 10,640 Signature of Certifier: Keith Kacyon

Retention Code: ENV 5.5 BN-0618 (04/03)

Truck E107170

Trailer 009

2

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2) 8-25-05

SWO USE (Circle One Area) AREA 23 6 9 LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test cell A CAU-115 BS 8/30/05

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses; Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper	☐ Rocks / unaltered geologic materials	☐ Empty containers			
☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☐ Demolition debris
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Cement & concrete

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Manag knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those ma site. I have verified this through the waste characterization method identified abc prohibited and allowable waste items.

Print Name: Robert Murdock

Signature: Robert Murdock Date: 08-25-05

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☑ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 8-25-05

BN-0646 (09/99)

Note: Food waste, office trash and/or animal carcasses are considered not to contain added radioactivity, and therefore do not require a radiological clearance.

SWO USE ONLY

Load Weight (net from scale or estimate): 17,080 Signature of Certifier: Keith Kaysay

Retention Code: ENV 5.0 BN-5816 (04/03)

Truck - E107170

Trailer - 33

(2)

Bechtel Nevada NTS Landfill Load Verification

(Waste definitions are available on page 2) 9-1-05

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BN Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS KMD 10/4/05	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers
☐ Asphalt ☐ Metal ☐ Wood ☐ Soil ☐ Rubber (excluding tires) ☐ Demolition debris
☑ Plastic ☐ Wire ☐ Cable ☐ Cloth ☐ Insulation (non-Asbestosform) ☐ Cement & concrete
☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses
☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos ☐ Drained automobiles and military vehicles ☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO) ☐ Drained fuel filters (gas & diesel) ☐ Deconned Underground and Above Ground
☐ Hydrocarbons (contact SWO) ☑ Other Perlite ☐ Tanks

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge ☐ Rags ☐ Drained fuel filters (gas & diesel) ☐ Crushed non-terne plated oil filters
☐ Plants ☐ Soil ☐ Sludge from sand/oil/water separators ☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those materials that are allowed for disposal at this site. I have verified this through the waste characterization method identified a prohibited and allowable waste items.

Print Name: Robert J Murdock

Signature: Robert K Murdock Date: 9-01-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.
☐ This container/load is exempt from survey due to process knowledge and origin.
☒ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 9/1/05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 6.160 Signature of Certifier: Keith Kaczy

Retention Code: ENV 5.0 BN-0646 (04/03)

TRK: E106400 @ 8:20 AM

TRL: 29

(4)

Bechtel Nevada

NTS Landfill Load Verification

(Waste definitions are available on page 2)

SWO USE (Circle One Area) AREA 23 6 (9) LANDFILL

For waste characterization, approval, and/or assistance, contact Solid Waste Operation (SWO) at 5-7898.

REQUIRED: WASTE GENERATOR INFORMATION

(This form is for rolloffs, dump trucks, and other onsite disposal of materials.)

Waste Generator: BJ Construction (Mike Kruzic) Phone Number: 5-7396

Location / Origin: Area 25 Test Cell A CAU-115

Waste Category: (check one)		☐ Commercial	☑ Industrial	
Waste Type: (check one)	☑ NTS (Law 10/10/05)	☐ Putrescible	☑ FFACO-onsite	☐ WAC Exception
	☐ Non-Putrescible	☐ Asbestos Containing Material	☐ FFACO-offsite	☐ Historic DOE/NV
Pollution Prevention Category: (check one)		☑ Environmental management	☐ Defense Projects	☐ YMP
Pollution Prevention Category: (check one)		☑ Clean-Up	☐ Routine	
Method of Characterization: (check one)		☑ Sampling & Analysis	☑ Process Knowledge	☐ Contents

Prohibited Waste at all three NTS landfills: Radioactive waste; RCRA waste; Hazardous waste; Free liquids, PCBs above TSCA regulatory levels-, and Medical wastes (needles, sharps, bloody clothing).

Additional Prohibited Waste at the Area 9 U10c Landfill: Sewage Sludge; Animal carcasses-, Wet garbage (food waste); and Friable asbestos

REQUIRED: WASTE CONTENTS ALLOWABLE WASTES

Check all allowable wastes that are contained within this load:

NOTE: Waste disposed at the Area 6 Hydrocarbon Landfill must have come into contact with petroleum hydrocarbons or coolants such as: gasoline (no benzene, lead); jet fuel; diesel fuel; lubricants and hydraulics; kerosene; asphaltic petroleum hydrocarbon; and ethylene glycol.

Acceptable waste at any NTS landfill:

☐ Asphalt	☐ Metal	☐ Wood	☐ Soil	☐ Rubber (excluding tires)	☐ Demolition debris
☑ Plastic	☐ Wire	☐ Cable	☐ Cloth	☐ Insulation (non-Asbestosform)	☐ Cement & concrete

☐ Paper ☐ Rocks / unaltered geologic materials ☐ Empty containers

☐ Manufactured items: (swamp coolers, furniture, rugs, carpet, electronic components, PPE, etc.)

Additional waste accepted at the Area 23 Mercury Landfill: ☐ Office waste ☐ Food Waste ☐ Animal Carcasses

☐ Asbestos: ☐ Friable ☐ Non-Friable (contact SWO if regulated load) Quantity: _____

Additional waste accepted at the Area 9 U10c Landfill:

☐ Non-friable asbestos	☐ Drained automobiles and military vehicles	☐ Solid fractions from sand/oil/water separators
☐ Light ballasts (contact SWO)	☐ Drained fuel filters (gas & diesel)	☐ Deconned Underground and Above-Ground Tanks
☐ Hydrocarbons (contact SWO)	☑ Other Perlite	

Additional waste accepted at the Area 6 Hydrocarbon Landfill: ☐ Other _____

☐ Septic sludge	☐ Rags	☐ Drained fuel filters (gas & diesel)	☐ Crushed non-terne plated oil filters
☐ Plants	☐ Soil	☐ Sludge from sand/oil/water separators	☐ PCBs below 50 parts per million

REQUIRED: WASTE GENERATOR SIGNATURE

Initials: _____ *(If initialed, no radiological clearance is necessary.)*

The above mentioned waste was generated outside of a Controlled Waste Management Area (CWMA) and to the best of my knowledge, does not contain radiological materials.

To the best of my knowledge, the waste described above contains only those materials that are allowed for disposal at this site. I have verified this through the waste characterization method identified above and a review of the above-mentioned prohibited and allowable waste items.

Print Name: Robert K Murdock

Signature: Robert K Murdock Date: 09-01-05

Note: Food waste, office trash and/or animal carcasses are considered not to contain or require a radiological clearance.

Radiation Survey Release for Waste Disposal

RCT Initials

☐ This container/load is free of external radioactive contamination.

☐ This container/load is exempt from survey due to process knowledge and origin.

☒ This container/load is free of radioactive contamination based on radioanalysis.

SIGNATURE: _____ DATE: 9/1/05

BN-0646 (09/99)

SWO USE ONLY

Load Weight (net from scale or estimate): 6020 Signature of Certifier: Keith Kanzy

TRK: 6106400

TIS: 8

Retention Code: ENV 5.5

BN-0518 (04/03)

RCVD 4/21/05

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N V 3 8 9 0 0 9 0 0 0 1 | Manifest Document No. 0 5 0 2 0 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: Bechtel Nevada for US DOE, P.O. BOX 98521, m/s NTS 110, Las Vegas, NV 89193

4. Generator's Phone (702) 295 - 0311

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: MP Environmental Services

6. US EPA ID Number: C A T 0 0 0 6 2 4 2 4 7

C. State Transporter's ID

D. Transporter's Phone (505) 458 - 3036

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone ( ) -

9. Designated Facility Name and Site Address: US Ecology, Hwy 95, 12 miles South of Beatty, Beatty, NV 89003

10. US EPA ID Number: N V T 3 3 0 0 1 0 0 0 0

G. State Facility's ID

H. Facility's Phone (800) 239 - 3943

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Hazardous waste, solid, n.o.s. (cadmium), 9, NA3077, III (asbestos)	RQ	1	CM	3000	P	D006
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
A: ERG 171;BN-NTS-05-0087; 13-3388
B:
C:
D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Shipment origin: BN for USDOE, Nevada Test Site, Hwy 95, Mercury, NV 89023.
24-hour emergency contact # (702) 295-0311 (call collect).
Use Proper PPE when handling containers.
Certificate of Destruction is required.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Cirilo Carlos Gonzales | Signature | Month Day Year: 10 4 05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Jim Self | Signature | Month Day Year: 10 4 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space
13a) Weight Received 2220 P MB

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Misty Brooks | Signature | Month Day Year: 10 4 05

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ORIGINAL - RETURN TO GENERATOR

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Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NV3890090001 | Manifest Document No.: 05037

2. Page 1 of 7 | Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: Bechtel Nevada for US DOE, P.O. BOX 98521, m/s NTS 110, Las Vegas, NV 89193

4. Generator's Phone (702) 630 - 0235 ATTN: C. Carlos Gonzales

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: MP Environmental Services | 6. US EPA ID Number: CAT000624247

C. State Transporter's ID

D. Transporter's Phone (800) 458 - 3036

7. Transporter 2 Company Name | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: US Ecology, Hwy 95, 12 miles South of Beatty, Beatty, NV 89003 | 10. US EPA ID Number: NVT330010000

G. State Facility's ID

H. Facility's Phone (800) 239 - 3943

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. UN2809, Waste Mercury, 8, III (mercury)	RQ	1	DF	7	P	D009
b. UN1824, Waste Sodium Hydroxide solution, 8, II	X	1	DF	35	P	D002
c. UN3267, Corrosive liquid, basic, organic, n.o.s., 8, II	X	1	DF	52	P	N/A
d. UN1268, Waste Petroleum Distillates, n.o.s. (mineral spirits), 3, III (D001)	RQ	1	DM	309	P	D001

J. Additional Descriptions for Materials Listed Above

A: ERG 172; BN-NTS-05-0123; 13-0962.
B: ERG 154; BN-NTS-05-0125; 13-5512.
C: ERG 153; BN-NTS-05-0139; 13-1015-LP.
D: ERG 126; BN-NTS-05-0090; 13-5555.

K. Handling Codes for Wastes Listed Above

PROGRAMS OCT 12 2005 DOE/NV/UCO

15. Special Handling Instructions and Additional Information

Shipment origin: BN for USDOE, Nevada Test Site (NTS), Hwy 95, Mercury, NV 89023.
24-hour emergency contact # (702) 295-0311 (call collect).
Use Proper PPE when handling containers.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Cirilo Carlos Gonzales	C. Carlos Gonzales	09	12	05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Tim Self		09	13	05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Lamar Watkins		09	13	05

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ORIGINAL-RETURN TO GENERATOR

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Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21. Generator's US EPA ID No.: NV3890090001 | Manifest Document No.: 05037

22. Page: 2 of 7 | Information in the shaded areas is not required by Federal law.

23. Generator's Name: Bechtel Nevada for U.S. DOE, P.O. Box 98521 m/s NTS 110, Las Vegas, NV 89193, 702-630-0235

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ___ Company Name | 25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone ( ) -

26. Transporter ___ Company Name | 27. US EPA ID Number

P. State Transporter's ID ( ) -

Q. Transporter's Phone

	28. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	UN1263, Waste Paint related material, 3, II	X	1	DM	261	P	D001,F003,F005
b.	UN1993, Waste Flammable liquids, n.o.s. (ethyl lactate, petroleum distillates), 3, III	X	4	DF	162	P	D001
c.	UN1999, Waste Tars, liquid, 3, III (D001)	RQ	8	DM	4,322	P	D001
d.	UN1993, Waste Flammable liquids, n.o.s., 3, II	X	1	DM	91	P	D001
e.	UN1307, Waste Xylenes, 3, III (p-xylene)	RQ	1	DM	451	P	D001
f.	UN1230, Waste Methanol, 3, II	X	7	DM	2,760	P	U154
g.	UN1263, Waste Paint related material, 3, II	X	1	DM	172	P	D001, F005
h.	UN1863, Waste Fuel, aviation, turbine engine, 3, III (D001)	RQ	1	DM	435	P	D001, D018
i.	UN1263, Waste Paint, 3, II	X	1	DM	228	P	D001, D007

S. Additional Descriptions for Materials Listed Above

A: ERG #128; BN-NTS-05-0091; 13-0955.
B: ERG #128; BN-NTS-05-0100 thru -0103; 13-1006.
C: ERG #130; BN-NTS-05-0115 thru -0122; 13-5554.
D: ERG #128; BN-NTS-05-0126; 13-1015-LP.
E: ERG #130; BN-NTS-05-0131; 13-5546.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

F: ERG #131; BN-NTS-05-0132 thru -0135, -0196 thru -0198; 13-3446.
G: ERG #128; BN-NTS-05-0148; 13-0955.
H: ERG #128; BN-NTS-05-0150; 13-1495.
I: ERG #128; BN-NTS-05-0281; 13-1015-LP.
Origin: Nevada Test Site. 24-hour emergency contact: (702) 295-0311 (collect).

GENERATOR

33. Transporter ___ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date: Month Day Year

34. Transporter ___ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

35. Discrepancy Indication Space

FACILITY

Please print or type. (Form designed for use on elite / tch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.
NV3890090001	05037	3 of 7	

23. Generator's Name: Bechtel Nevada for U.S. DOE, P.O. Box 98521 m/s NTS 110, Las Vegas, NV 89193, 702-630-0235

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ___ Company Name

25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone

26. Transporter ___ Company Name

27. US EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone

	28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	UN1863, Waste Fuel, aviation, turbine engine, 3, III (D001)	RQ	1	DF	258	P	D001, D018
b.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III	X	1	DF	83	P	D008
c.	UN1993, Waste Flammable liquids, n.o.s. (ethyl acetate), 3, II	X	1	DF	12	P	F003
d.	UN1993, Waste Flammable liquids, n.o.s. (acetone, MEK), 3, II (D001)	RQ	1	DM	194	P	D001,D003,D027 D029,D035,D039
e.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III	X	1	DM	114	P	D008, F005
f.	NA3077, Hazardous waste, solid, n.o.s. (benzene), 9, III	X	2	DM	63	P	D018
g.	UN1120, Waste Butanols, 3, III	X	4	DM	1,627	P	U031
h.	UN1262, Waste Octanes, 3, II	X	1	DM	359	P	D001
i.	UN1219, Waste Isopropyl Alcohol, 3, II (D001)	RQ	1	DM	482	P	D001

S. Additional Descriptions for Materials Listed Above

A: ERG #128; BN-NTS-05-0162; 13-1495.
B: ERG #171; BN-NTS-05-0179; 13-1019.
C: ERG #128; BN-NTS-05-0181; 13-1518.
D: ERG #128; BN-NTS-05-0182; 13-5503.
E: ERG #171; BN-NTS-05-0188; 13-5522.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

F: ERG #171; BN-NTS-05-0110, -0189; 13-1023.
G: ERG #129; BN-NTS-05-0192 thru -0195; 13-5557.
H: ERG#128; BN-NTS-05-0199; 13-5553.
I: ERG #129; BN-NTS-05-0200; 13-1504.
Origin: Nevada Test Site. 24-hour emergency contact: (702) 295-0311 (collect).

GENERATOR

TRANSPORTER

33. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

34. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

35. Discrepancy Indication Space

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Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21. Generator's US EPA ID No.: NV3890090001 | Manifest Document No.: 05037

22. Page: 4 of 7 | Information in the shaded areas is not required by Federal law.

23. Generator's Name

Bechtel Nevada for U.S. DOE
P.O. Box 98521 m/s NTS 110
Las Vegas, NV 89193
702-630-0235

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ___ Company Name | 25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone ( ) -

26. Transporter ___ Company Name | 27. US EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone ( ) -

GENERATOR

	28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	UN1993, Waste Flammable liquids, n.o.s., 3, III	X	1	DF	5	P	D035,F002,F003 F005
b.	UN1992, Waste Flammable liquids, toxic, n.o.s., 3 (6.1), II	X	1	DM	237	P	D001,D005,D035
c.	Waste Consumer Commodity, ORM-D	X	1	DF	38	P	D001,U226
d.	UN1198, Waste Formaldehyde, solutions, flammable, 3 (8), III (formaldehyde)	RQ	1	DM	572	P	D001, U122
e.	UN1198, Waste Formaldehyde, solutions, flammable, 3 (8), III (formaldehyde)	RQ	1	DF	506	P	D001, U122
f.	UN2686, Waste 2-Diethylaminoethanol, 8 (3), II	X	1	DM	33	P	D001
g.	UN1760, Waste Corrosive liquids, n.o.s. (sulfuric acid, chromium), 8, II	X	1	DF	8	P	D002, D007
h.	NA3082, Hazardous waste, liquid, n.o.s. (silver), 9, III	X	1	DF	118	P	D011
i.	NA3082, Hazardous waste, liquid, n.o.s. (cadmium, silver), 9, III	X	1	DM	489	P	D006, D011

S. Additional Descriptions for Materials Listed Above

A: ERG #128; BN-NTS-05-0274; 13-1015-LP.
B: ERG #131; BN-NTS-05-0279; 13-1015-LP.
C: ERG #171; BN-NTS-05-0280; 13-0956.
D: ERG #132; BN-NTS-05-0128; 13-5556.
E: ERG #132; BN-NTS-05-0129; 13-5556.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

F: ERG #132; BN-NTS-05-0130; 13-5544.
G: ERG #154; BN-NTS-05-0187; 13-5515.
H: ERG#171; BN-NTS-05-0092; 13-1013.
I: ERG #171; BN-NTS-05-0093; 13-1024.
Origin: Nevada Test Site. 24 hour emergency contact: (702) 295-0311 (collect)

TRANSPORTER

33. Transporter ____ Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

34. Transporter ____ Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

35. Discrepancy Indication Space

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UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21. Generator's US EPA ID No.: NV3890090001 | Manifest Document No.: 05037

22. Page: 5 of 7 | Information in the shaded areas is not required by Federal law.

23. Generator's Name: Bechtel Nevada for U.S. DOE, P.O. Box 98521 m/s NTS 110, Las Vegas, NV 89193, 702-630-0235

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ___ Company Name | 25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone ( ) -

26. Transporter ___ Company Name | 27. US EPA ID Number

P. State Transporter's ID ( ) -

Q. Transporter's Phone

	28. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	NA3082, Hazardous waste, liquid, n.o.s. (cadmium), 9, III	X	1	DM	296	P	D006
b.	NA3077, Hazardous waste, solid, n.o.s. (benzene, toluene, MEK), 9, III	X	2	DM	264	P	D018,F003,F005
c.	NA3077, Hazardous waste, solid, n.o.s. (benzene), 9, III	X	2	DM	199	P	D018
d.	NA3077, Hazardous waste, solid, n.o.s. (benzene), 9, III	X	3	DM	483	P	D018
e.	NA3077, Hazardous waste, solid, n.o.s. (benzene), 9, III	X	2	DF	45	P	D018
f.	NA3077, Hazardous waste, solid, n.o.s. (benzene), 9, III	X	1	DF	41	P	D018
g.	NA3077, Hazardous waste, solid, n.o.s. (mercury), 9, III	X	1	DF	56	P	D009
h.	NA3077, Hazardous waste, solid, n.o.s. (chromium, benzene), 9, III	X	1	DM	127	P	D007,D018,F002 F003, F005
i.	NA3077, Hazardous waste, solid, n.o.s. (toluene, MEK), 9, III	X	1	DM	64	P	F005

GENERATOR

S. Additional Descriptions for Materials Listed Above

A: ERG #171; BN-NTS-05-0104; 13-1024.
B: ERG #171; BN-NTS-05-0105, -0159; 13-1025.
C: ERG #171; BN-NTS-05-0106, -0158; 13-1025.
D: ERG #171; BN-NTS-05-0107, -0142, -0143; 13-1017.
E: ERG #171; BN-NTS-05-0108, -0144; 13-1017.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

F: ERG #171; BN-NTS-05-0112; 13-1023.
G: ERG #171; BN-NTS-05-0114; 13-1506.
H: ERG#171; BN-NTS-05-0147; 13-1025.
I: ERG #171; BN-NTS-05-0149; 13-1025.
Origin: Nevada Test Site. 24-hour emergency contact: (702) 295-0311 (collect).

TRANSPORTER

33. Transporter ____ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date (Month Day Year)

34. Transporter _____ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date (Month Day Year)

FACILITY

35. Discrepancy Indication Space

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UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.
NV3890090001	05037	6 of 7	

23. Generator's Name: Bechtel Nevada for U.S. DOE, P.O. Box 98521 m/s NTS 110, Las Vegas, NV 89193, 702-630-0235

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ___ Company Name — 25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone ( ) -

26. Transporter ___ Company Name — 27. US EPA ID Number

P. State Transporter's ID ( ) -

Q. Transporter's Phone

	28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	NA3077, Hazardous waste, solid, n.o.s. (barium, cadmium), 9, III	X	1	DM	168	P	D005,D006,D007 D008
b.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III	X	1	DM	67	P	D008
c.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III	X	5	DM	365	P	D008
d.	NA3077, Hazardous waste, solid, n.o.s. (cadmium, lead), 9, III	X	1	DM	2,286	P	D006, D008
e.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III	X	1	DF	34	P	D008
f.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III	X	1	DM	93	P	D008
g.	NA3077, Hazardous waste, solid, n.o.s. (mercury), 9, III	X	1	DF	7	P	D009
h.	NA3077, Hazardous waste, solid, n.o.s. (lead), 9, III (lead)	RQ	1	DM	310	P	D008
i.	NA3077, Hazardous waste, solid, n.o.s. (mercury), 9, III	X	1	DF	3	P	D009

il 9/13/09

S. Additional Descriptions for Materials Listed Above

A: ERG #171; BN-NTS-05-0160; 13-1018.
B: ERG #171; BN-NTS-05-0161; 13-1011.
C: ERG #171; BN-NTS-05-0163 thru -0166, -0183; 13-1506.
D: ERG #171; BN-NTS-05-0167 thru -0177; 13-1011.
E: ERG #171; BN-NTS-05-0178; 13-1020.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

F: ERG #171; BN-NTS-05-0180; 13-1020.
G: ERG #171; BN-NTS-05-0191; 13-1506.
H: ERG#171; BN-NTS-05-0211; 13-1019.
I: ERG #171; BN-NTS-05-0273; 13-1064.
Origin: Nevada Test Site. 24-hour emergency contact: (702) 295-0311 (collect).

GENERATOR

TRANSPORTER

33. Transporter ___ Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date (Month Day Year)

34. Transporter ___ Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date (Month Day Year)

FACILITY

35. Discrepancy Indication Space

Please print or type. (Form designed for use on elite pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.
NV3890090001	05037	7of 7	

23. Generator's Name: Bechtel Nevada for U.S. DOE, P.O. Box 98521 m/s NTS 110, Las Vegas, NV 89193, 702-630-0235

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ___ Company Name | 25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone ( ) -

26. Transporter ___ Company Name | 27. US EPA ID Number

P. State Transporter's ID ( ) -

Q. Transporter's Phone

	HM	28. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	X	NA3077, Hazardous waste, solid, n.o.s., 9, III	1	DF	27	P	D006,D008,F003 F005
b.	X	UN3390, Waste Toxic by inhalation liquid, corrosive, n.o.s. (methanephosphonic acid dichloride), 6.1 (8), I Inhalation Hazard Zone B	1	DM	109	P	D003
c.	X	UN1836, Waste Thionyl chloride, 8, I	1	DM	120	P	D003
d.	X	UN1593, Waste Dichloromethane, 6.1, III	1	DM	120	P	U080
e.	X	UN3352, Pyrethroid pesticide, liquid, toxic, 6.1, III	1	DF	12	P	Non-RCRA
f.	X	UN2783, Organophosphorus pesticides, solid, toxic, 6.1, II	1	DF	8	P	Non-RCRA
g.		Non-DOT, Non-Regulated Material (hydrocarbon dielectric fluid, triethyl phosphate, & 2,6-Diethylaniline)	17	DM	7,218	P	Non-RCRA
h.		Non-DOT, Non-Regulated Material (DV methyl ester & m-phenoxybenzyl alcohol)	2	DF	77	P	Non-RCRA
i.							

S. Additional Descriptions for Materials Listed Above
A: ERG #171; BN-NTS-05-0275; 13-1015-LP.
B: ERG #154; BN-NTS-05-0040; 13-3564.
C: ERG #137; BN-NTS-05-0184; 13-1015-LP.
D: ERG #160; BN-NTS-05-0127; 13-1015-LP.
E: ERG #151; BN-NTS-05-0138; 13-5539.

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information
F: ERG #152; BN-NTS-05-0140; 13-1015-LP.
G: BN-NTS-05-0043, -0044, -0047 thru -0051, -0201 thru -0210; 13-5545.
H: BN-NTS-05-0136, -0137; 13-5545.
I:
Origin: Nevada Test Site. 24-hour emergency contact: (702) 295-0311 (collect).

TRANSPORTER

33. Transporter ___ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date (Month Day Year)

34. Transporter ___ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date (Month Day Year)

FACILITY

35. Discrepancy Indication Space

STRAIGHT BILL OF LADING

ORIGINAL—NOT NEGOTIABLE

Shipper No. 05038

Carrier No. _____

Page 1 of 1 RINCHEM Company (Name of carrier) (SCAC) Date _____

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1.

TO: Consignee: RINCHEM Company, Inc.
Street: 6133 Edith Blvd, NE
City: Albuquerque, State: NM, Zip Code: 87107

FROM: Shipper: Bechtel Nevada for US DOE
Attn: C. Carlos Gonzales
Street: P.O. Box 98521, m/s NTS110
City: Las Vegas, State: Nevada, Zip Code: 89193-8521
Physical Location – Nevada Test Site
24 hr. Emergency Contact Tel. No (702) 295-0311

Route: _____ Vehicle Number: _____

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class, Identification Number (UN or NA), Packing Group, per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
51 DF		Universal Waste Lamps - Fluorescent Light Tubes RC6814; 28,982 ft; #NTS-05-0213 to -0221,-0223 to -0257,-0261,		5,317 lbs.		
		-0265 to -0267, -0269,-0270,-0276.				
3 DF		Universal Waste Lamps – Broken Fluorescent Light Tubes RC6815; 50 gallons; #NTS-05-0222, -0259, -0268.		69 lbs.		
1DF		Universal Waste Lamps – High Pressure Sodium Lamps RC6313; 5 gallons; 9 each; #NTS-05-0258.		6 lbs.		
1 DF		Universal Waste Lamps – Mercury Vapor Lamps RC6319; 20 gallons; 5 each; #NTS-05-0260.		13 lbs..		
3 DF	X	Batteries, dry, containing potassium hydroxide solid, 8, UN3028, III (Nickel-Cadmium);RC6816, 60-gal.; #NTS-05-0212,-0262,		242 lbs.		
		-0271.				
1 DF	X	Batteries, dry, containing potassium hydroxide solid, 8, UN3028, III (Mercury);RC6317; 1 gallon.; #NTS-05-0263.		3 lbs.		
2 DF	X	Lithium battery, 9, UN3090, II RC6314; 3 gallons; #NTS-05-0264, -0272.		7 lbs.		
		--- last item ---				
		Use proper PPE when handling. Emergency 24-hour contact				
		number is 702-295-0311 (collect).				

PLACARDS TENDERED: YES ☐ NO ☐

REMIT C.O.D. TO: ADDRESS

Note — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding
$ _____ per _____

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by ■ Rail ■ Highway ■ Water (DELETE NON-APPLICABLE MODE OF TRANSPORT) according to applicable international and national governmental regulations.
_____ Signature

COD Amt: $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
_____ (Signature of Consignor)

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER C. Carlos Gonzales
PER Bechtel Nevada for USDOE
(702) 295-6754 / 630-0235

CARRIER Stephen Jaramillo
PER Rinchem Co Inc
DATE 7-28-05

1

Permanent post-office address of shipper.

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STYLE F65 LABELMASTER, An American Labelmark Co., Chicago, IL 60646 800/621-5808

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: NV3890090001 | Manifest Document No.: 05040 | 2. Page 1 of 2 | Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: Bechtel Nevada for US DOE, PO Box 98521 M/S NTS110, Las Vegas, NV 89193

4. Generator's Phone (702) 295-0311 ATTN Stefan Duke

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: CAST Transportation | 6. US EPA ID Number: COR000005399 | C. State Transporter's ID | D. Transporter's Phone (800) 563-6374

7. Transporter 2 Company Name | 8. US EPA ID Number | E. State Transporter's ID | F. Transporter's Phone

9. Designated Facility Name and Site Address: Envirocare of Utah, Inc., Clive Disposal Site (Treatment Facility), Interstate 80, Exit 49, Clive, UT. 84029. | 10 US EPA ID Number: UTD982598898 | G. State Facility's ID | H. Facility's Phone: (435) 884-0155

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. UN2913, Waste Radioactive material, surface contaminated objects SCO-I, non fissile, 7, Cs137, Sr90, solid, oxide, 15.2 MBq	X	007	BA	10.390	K	D008
b. RQ UN3077, Hazardous waste solid, n.o.s., 9, PG III, (D008), non-DOT regulated radioactive material		001	CM	5.268	K	D008
c. Total				15.658	K	
d.						

J. Additional Descriptions for Materials Listed Above
Line a: ERG# 162; profile 9316-01; MEF F05006
Line b: ERG# 171; profile 9316-01; MEF F05006
Utah Permit number: 0310002528;
PKG #s, Descriptions, and TID #s as applicable are on page 2,
Exclusive Use Shipment

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24-hour emergency contact number (702) 295-0311 collect
Use proper PPE when handling containers.
Certificate of Disposal is required. Shipment ID 9316-01-0004 M08985

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Stefan Duke | Signature | Month Day Year: 09/19/05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Erin Ellis | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Justin Lee | Signature | Month Day Year: 09/21/05

Style F15 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete

ORIGINAL-RETURN TO GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NV3890090001 Manifest Document No. 05041
2. Page 1 of 2 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Bechtel Nevada for US DOE
PO Box 98521 M/S NTS110
Las Vegas, NV 89193

4. Generator's Phone (702) 295 - 0311 ATTN: Stefan Duke

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: CAST Transportation
6. US EPA ID Number: COR000005389
C. State Transporter's ID
D. Transporter's Phone (800) 369-6374

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Envirocare of Utah, Inc.
Clive Disposal Site (Treatment Facility)
Interstate 80, Exit 49;
Clive, UT 84029
10. US EPA ID Number: UTD982598898
G. State Facility's ID
H. Facility's Phone (435) 884 - 0155

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. UN3077, Hazardous waste solid, n.o.s., 9, PG III, (D008). non-DOT regulated radioactive material	RQ	005	CM	20,987	K	D008
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
Line a: ERG# 171; profile 9316-01; MEF F05008
Utah Permit number: 0310002528;
PKG #s, Descriptions, and TID #s as applicable are on page 2, M08986

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
24-hour emergency contact number (702) 295-0311 collect.
Use proper PPE when handling containers.
Certificate of Disposal is required. Shipment ID 9316-01-0005

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Stefan Duke		09	19	05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ronald D Mathias	Ronald D Mathias	09	20	05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
J. Gardner		09	21	05

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: NV3890090001
Manifest Document No.: 05018
2 Page 1 of 1

3. Generator's Name and Mailing Address:
Bechtel Nevada for U.S. DOE
P.O. Box 98521, M/S NTS113
Las Vegas, NV 89193

4. Generator's Phone ( ): (702) 295-0311

5. Transporter 1 Company Name: Rochester Environmental Services
6. US EPA ID Number: NVD982609625 CAT000624247
A. State Transporter's ID:
B. Transporter 1 Phone:

7. Transporter 2 Company Name
8. US EPA ID Number
C. State Transporter's ID
D. Transporter 2 Phone

9. Designated Facility Name and Site Address:
US ECOLOGY
Hwy 95, 12 mi. S. of Beatty
Beatty, NV 89003

10. US EPA ID Number: NVT330010000
E. State Facility's ID
F. Facility's Phone: 800-239-3943

11. WASTE DESCRIPTION	12. Containers No	Type	13. Total Quantity	14. Unit Wt./Vol
a. RQ Polychlorinated biphenyls, liquid, 9, UN2315, PG-III OUT-OF-SERVICE DATE: 23-FEB-2005	1	DM	121	K
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
A: ERG #171; Pkge #BN-NTS-05-0025; Profile #07013-1022.
B:
C:
D:

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
DRUM MUST BE INCINERATED 10-JAN-2006. Certificate of Disposal is required by 19-JAN-2006.
Shipment origin: BN for USDOE, Nevada Test Site (NTS), Hwy 95, Mercury, NV 89023.
24-hour emergency contact telephone: (702) 295-0311 (collect).
Use Proper PPE when handling containers.

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: C. Carlos Gonzales
Signature:
Date: Month 01 Day 03 Year 06

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Stephen Lamb
Signature:
Date: Month 01 Day [illegible] Year 06

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.
Printed/Typed Name: Layman Walk
Signature:
Date: Month Day Year

GENERATOR TRANSPORTER FACILITY

US Ecology
an American Ecology company

775-553-2203
Fax 775-553-2742

Certificate of Receipt and Disposal of PCB Waste

Disposal Facility
US Ecology Inc.
P.O. Box 578
Beatty, NV. 89003

EPA Identification Number
NVT330010000

Disposal Certification

Generator Name: Bechtel Nevada for US DOE

I HEREBY CERTIFY THAT PCB WASTE MATERIAL LISTED ON MANIFEST NO: 06010
AND ANY ATTACHMENTS WAS;

[X] Received at the US Ecology, Inc., Beatty, Nevada facility on: 1/3/2006

[ ] Landfilled at the US Ecology, Inc., Beatty, Nevada facility on:

[ ] Stored pending shipment for Off-Site Treatment/Incineration

[ ] Shipped for Incineration to Onyx P.A. on Manifest No. 01036/ 3441183 and Incinerated on: 1/22/06
1- 55 Gal. Drum Lg. Caps (Line 1a.)

Under civil and criminal penalties of law for making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.

For US Ecology Inc. Yvonne Wardwell
Yvonne Wardwell
Quality Director

Date: 1/23/2006

ENVIRONMENTAL SERVICES, L.L.C.

Federal EPA ID: TXD000838896
State EPA ID: 50212-001
Highway 73
Port Arthur, TX 77643
(409) 736-2821

US ECOLOGY INC
ATTN: MANIFEST SECTION
NVT330010000
HWY 95 11 MI SO OF BEATTY
BEATTY, NV 89003-0578

CERTIFICATE OF DESTRUCTION

Onyx Environmental Services, L.L.C. has received waste material from US ECOLOGY INC on 1/6/2006 as described on [State Manifest or Uniform] Hazardous Waste Manifest number 0003441183. Onyx Environmental Services, L.L.C., hereby certifies that the above described material was incinerated, and thereby destroyed, in accordance with the 40 CFR, part 761, as it pertains to the incineration of Poly-Chlorinated Biphenyl contaminated materials.

Sequence 1

Profile Number: CM2730
Onyx Tracking ID: 588281-01

Process	Onyx Unit ID	Treatment Date	Generator #
INCINERATION	1	1/22/2006	06010

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Melvin Stallworth

23-Jan-06

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APPENDIX E

USE RESTRICTION DOCUMENTATION

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CAU Use Restriction Information

CAU Number/Description: CAU 115: Area 25 Test Cell A Facility

Applicable CAS Numbers/Descriptions: CAS 25-41-04, Test Cell A Facility

Contact (organization/project): NNSA/NSO Industrial Sites Project Manager

Surveyed Area (UTM, Zone 11, NAD 27, meters):

CORNER	NORTHING	EASTING
Northeast	4,076,007.5	566,256.7
Southeast	4,075,962.9	566,256.7
Southwest	4,075,962.9	566,230.3
Northwest	4,076,007.5	566,230.3

Survey Date: 07/12/2005 **Survey Method (GPS, etc):** GPS

Site Monitoring Requirements: Visual Inspections

Required Frequency (quarterly, annually?): Annually

If Monitoring Has Started, Indicate last Completion Date: N/A

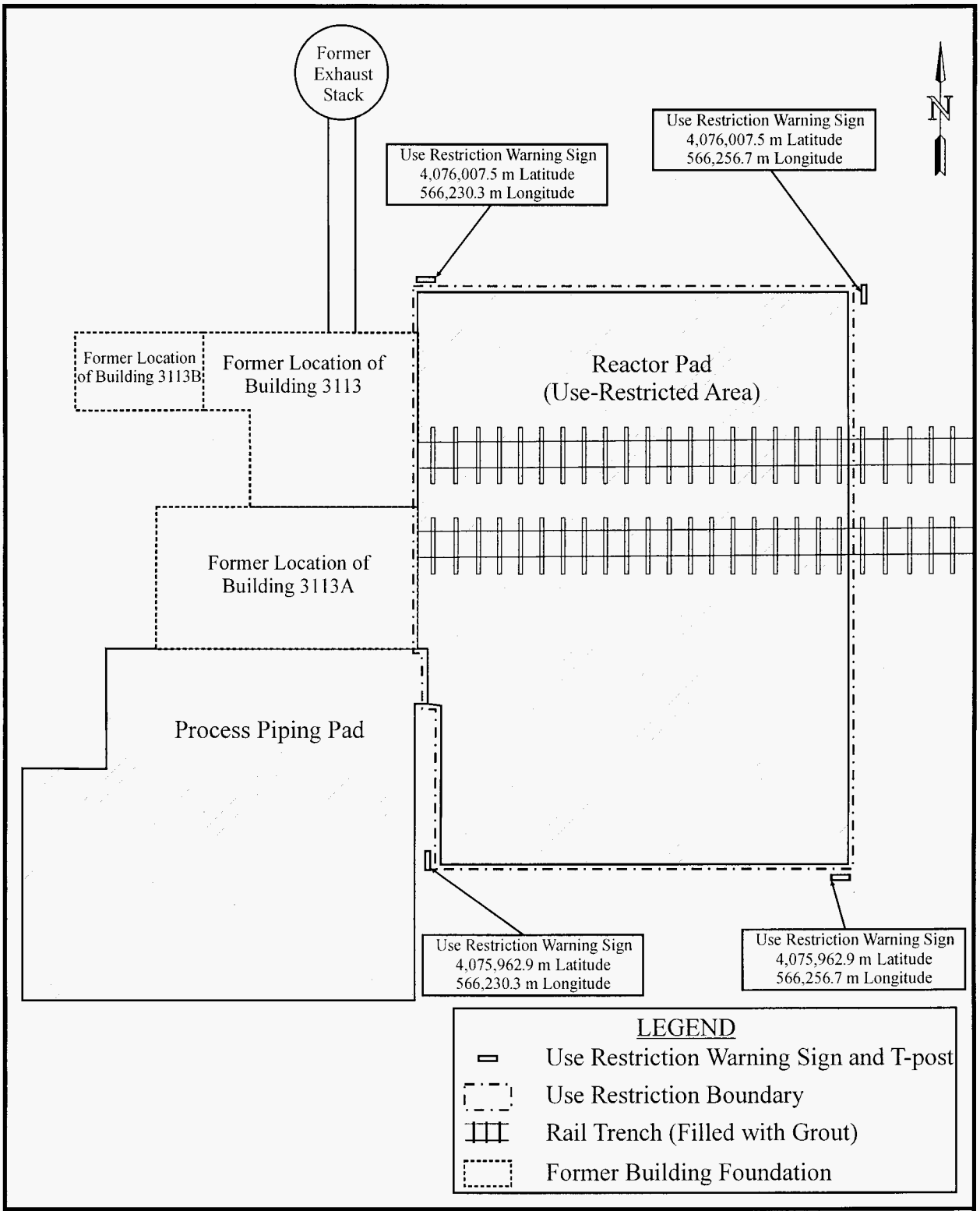
Use Restrictions

The future use of any land related to this Corrective Action Unit (CAU), as described by the above surveyed location, is restricted from any DOE or Air Force activity that may alter or modify the containment control as approved by the state and identified in the CAU Closure Report or other CAU documentation unless appropriate concurrence is obtained in advance.

Comments: See the Closure Report for additional information on the condition of the site(s) and any monitoring and/or inspection requirements.

Submitted By: Sabine Curtis **Date:** 3-2-06

cc with copy of survey map (paper and digital (dgn) formats):
CAU Files (2 copies)



CAU 115 USE RESTRICTION

APPENDIX F

SITE CLOSURE PHOTOGRAPHS

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PHOTOGRAPH LOG

PHOTOGRAPH NUMBER	DATE	PERSPECTIVE	DESCRIPTION
1	01/03/2005	Facing Northwest	Test Cell A Facility Before Closure Activities
2	01/03/2005	Facing Southeast	Test Cell A Facility Before Closure Activities
3	01/03/2005	Facing Southwest	Process Piping Pad Before Closure Activities
4	01/03/2005	Not Applicable	Cadmium Foil Covered Piping
5	02/24/2005	Not Applicable	Lead Brick Removal
6	03/08/2005	Not Applicable	Equipment Reservoir Fluid Sampling
7	04/20/2005	Facing East	Railroad Trench Grouting
8	04/20/2005	Facing East	Grouted Railroad Trenches
9	04/21/2005	Facing Northeast	Radiologically Impacted Soil Removal near NW Corner of Reactor Pad
10	06/02/2005	Facing West	Decontamination Activities on Roof
11	06/02/2005	Facing West	Exhaust Stack Demolition Debris
12	06/02/2005	Facing Southeast	Moveable Shed Demolition Debris
13	06/02/2005	Facing North	After Demolition of Building 3113B
14	06/02/2005	Facing North	After Removal of Process Piping
15	06/06/2005	Facing East	Demolition of Building 3113A
16	06/07/2005	Facing North	Building 3113A Demolition Debris
17	06/07/2005	Facing East	Demolition of Building 3113
18	06/15/2005	Facing East	Demolition of Building 3113
19	06/15/2005	Facing Southeast	Demolition of Building 3113
20	06/15/2005	Facing East	Building 3113 Demolition Debris
21	06/15/2005	Facing South	Shield Wall After Demolition of Building 3113
22	06/15/2005	Facing Northwest	Shield Wall After Demolition of Building 3113
23	06/21/2005	Facing Southwest	Drilling of Shield Wall for Emplacement of Explosives
24	06/23/2005	Facing West	Shield Wall Prepared for Explosive Demolition
25	06/23/2005	Facing West	Explosive Demolition of Shield Wall
26	06/29/2005	Not Applicable	Grouting of Penetrations
27	07/07/2005	Facing North	Low-Level Waste Currently Staged Onsite
28	07/09/2005	Facing Northeast	Perlite Removal From Dewar
29	08/16/2005	Facing Southwest	Demolition of Dewar
30	08/22/2005	Facing East	Final State of Remaining Concrete Foundations
31	08/22/2005	Facing Southeast	Radiological Posting and Use Restriction Warning Sign for Reactor Pad

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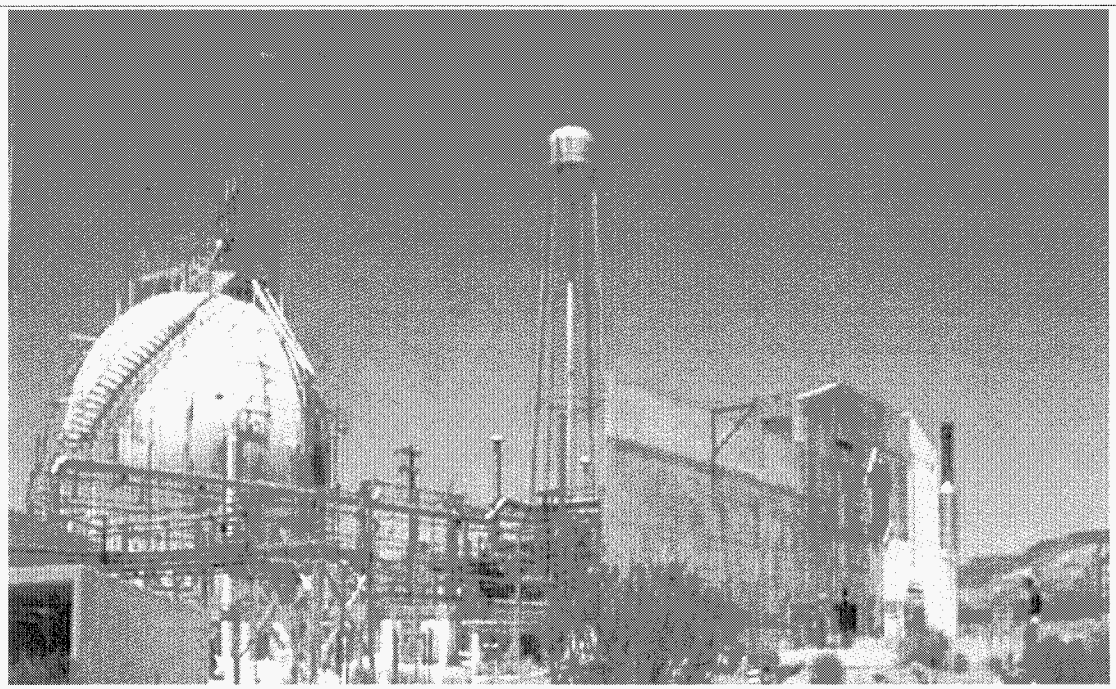
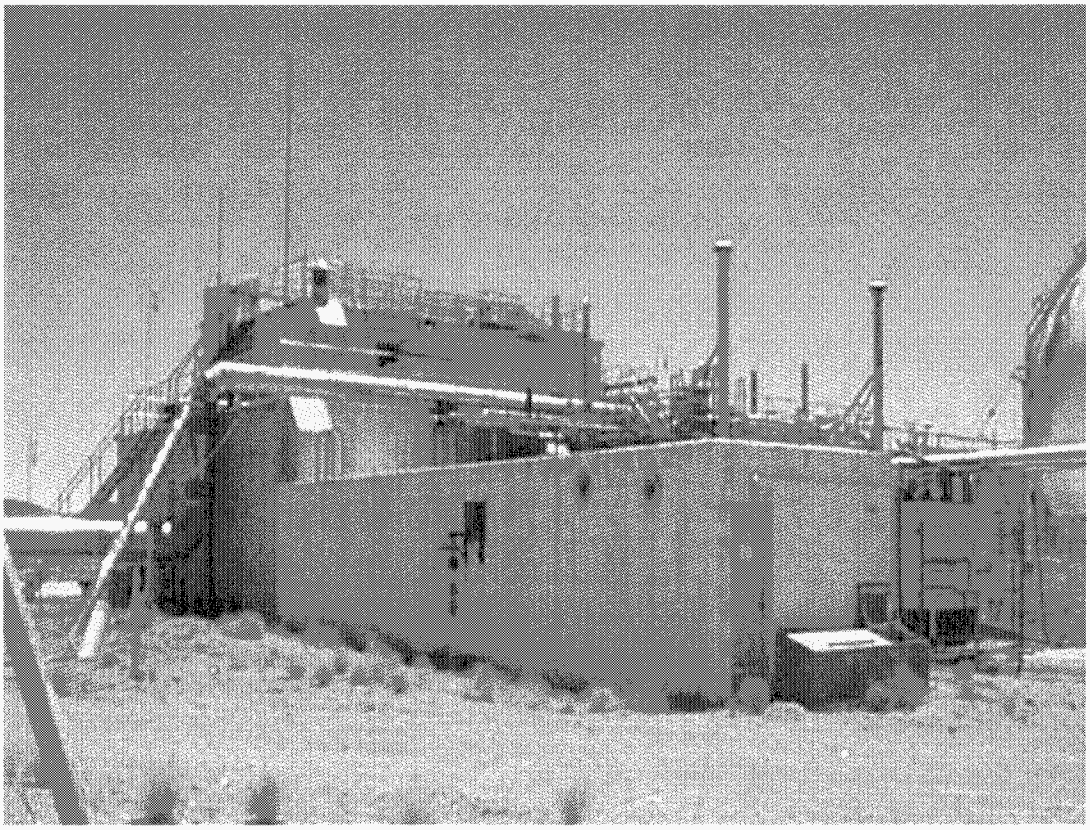
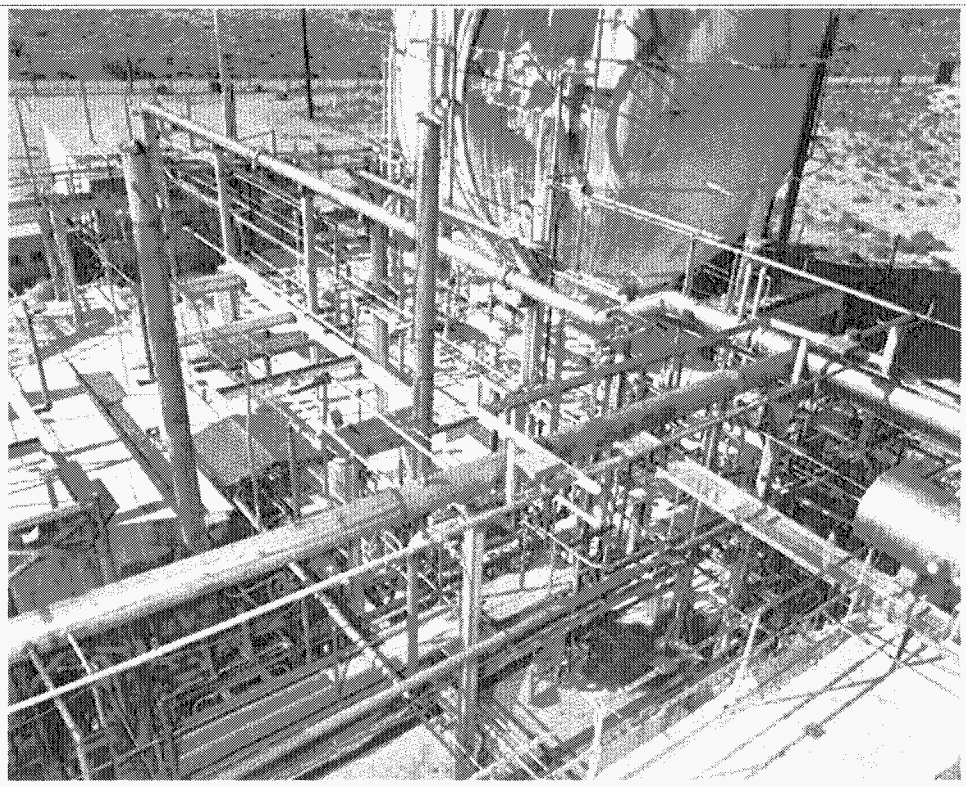


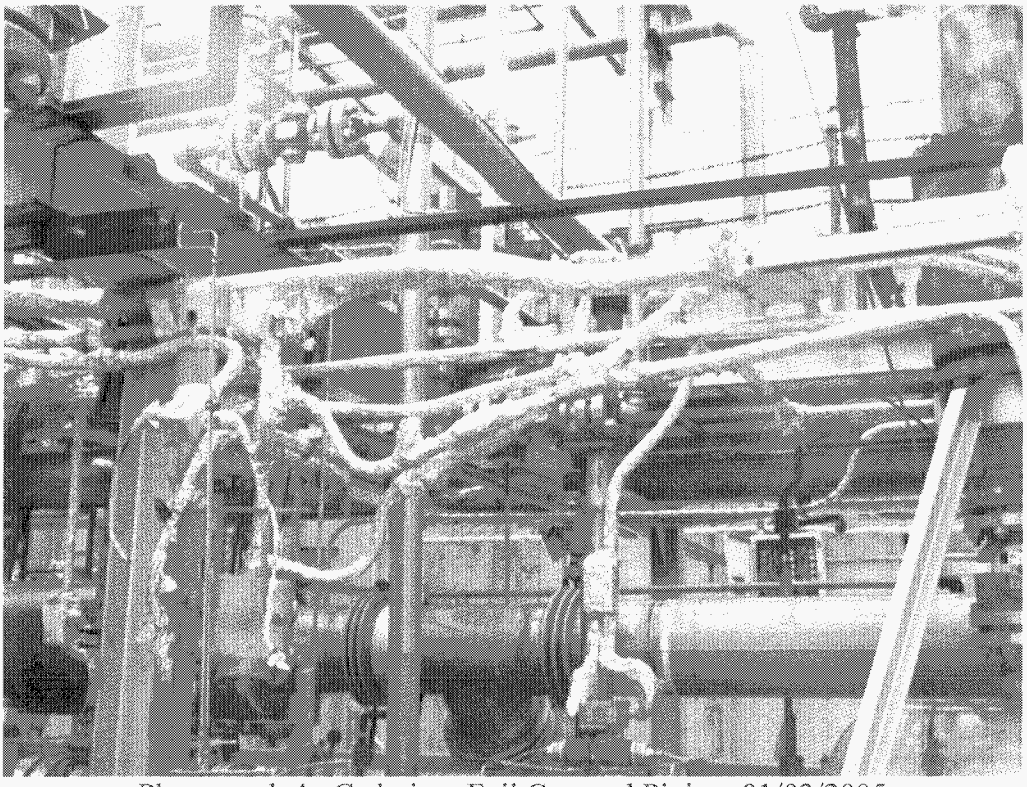
Photograph 1: Test Cell A Facility Before Closure Activities, Facing Northwest, 01/03/2005



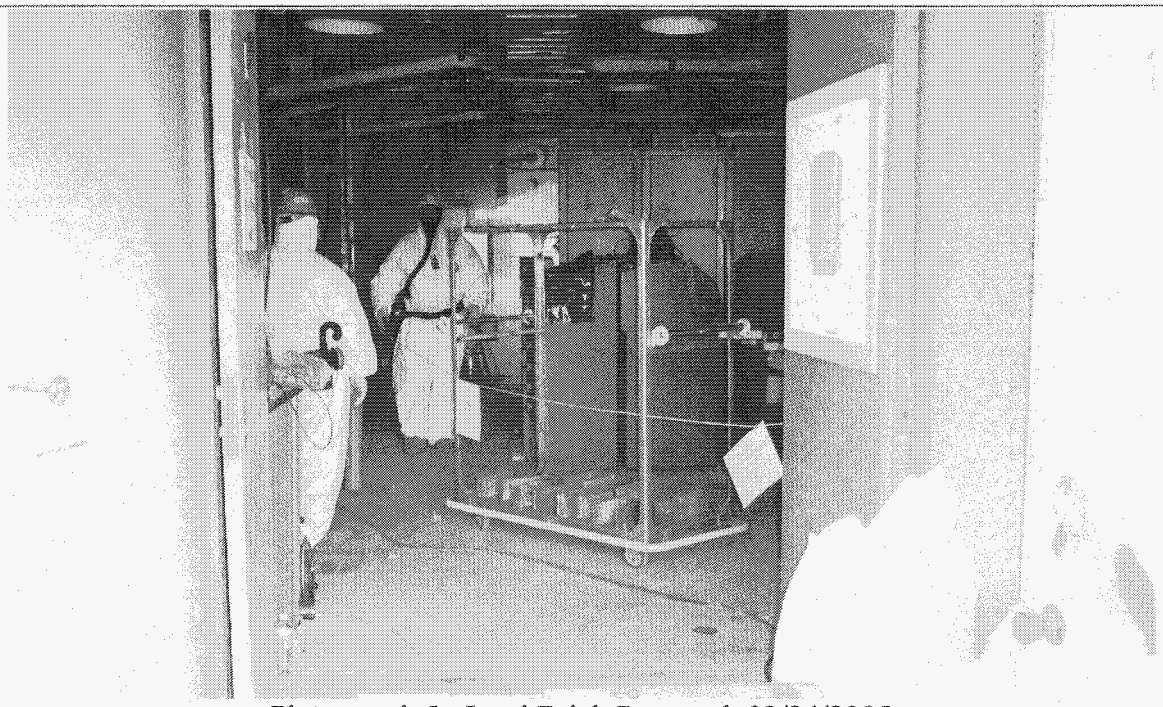
Photograph 2: Test Cell A Facility Before Closure Activities, Facing Southeast, 01/03/2005



Photograph 3: Process Piping Pad Before Closure Activities, Facing Southwest, 01/03/2005

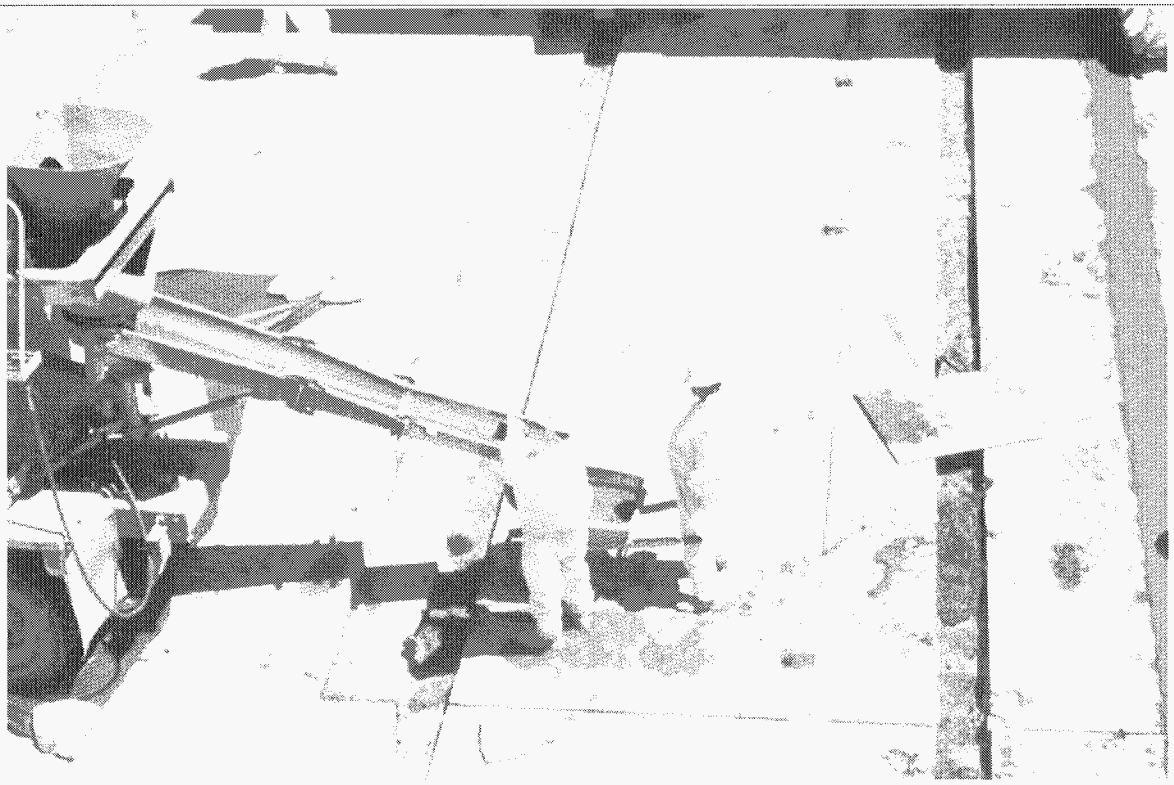


Photograph 4: Cadmium Foil Covered Piping, 01/03/2005

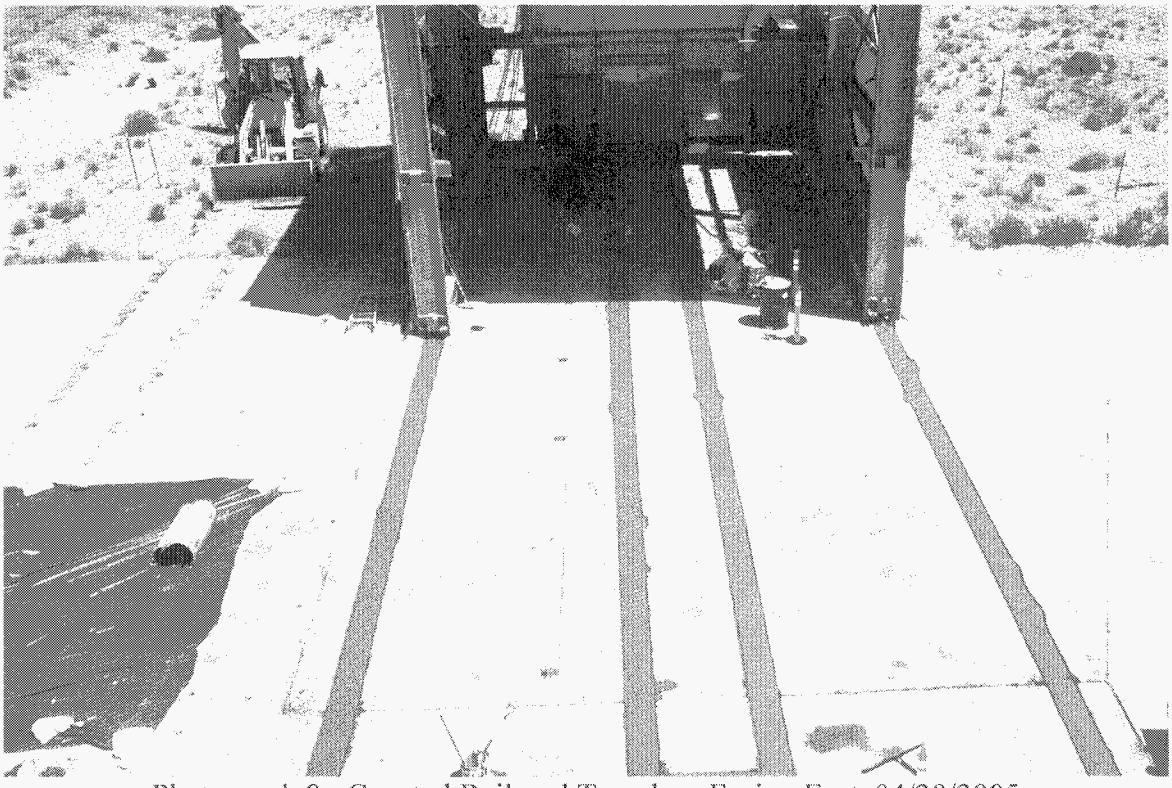


Photograph 5: Lead Brick Removal, 02/24/2005

Photograph 6: Equipment Reservoir Fluid Sampling, 03/08/2005



Photograph 7: Railroad Trench Grouting, Facing East, 04/20/2005



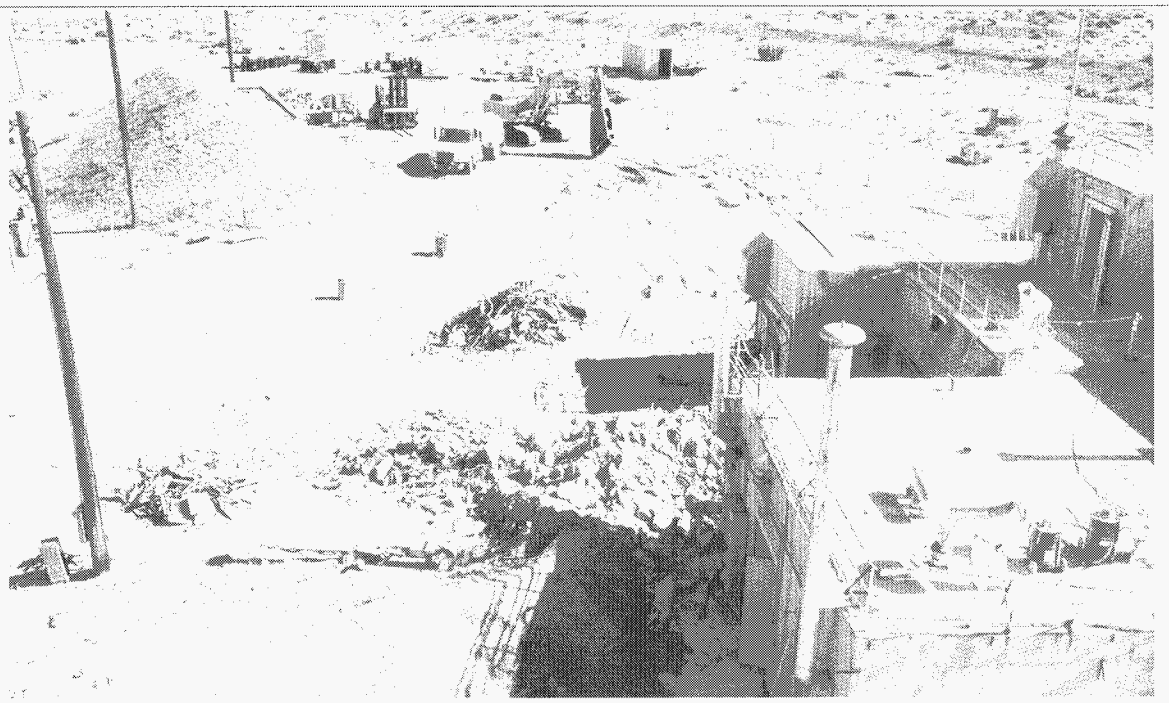
Photograph 8: Grouted Railroad Trenches, Facing East, 04/20/2005

Photograph 9: Radiologically Impacted Soil Removal near Northwest Corner of Reactor Pad, Facing Northeast, 04/21/2005

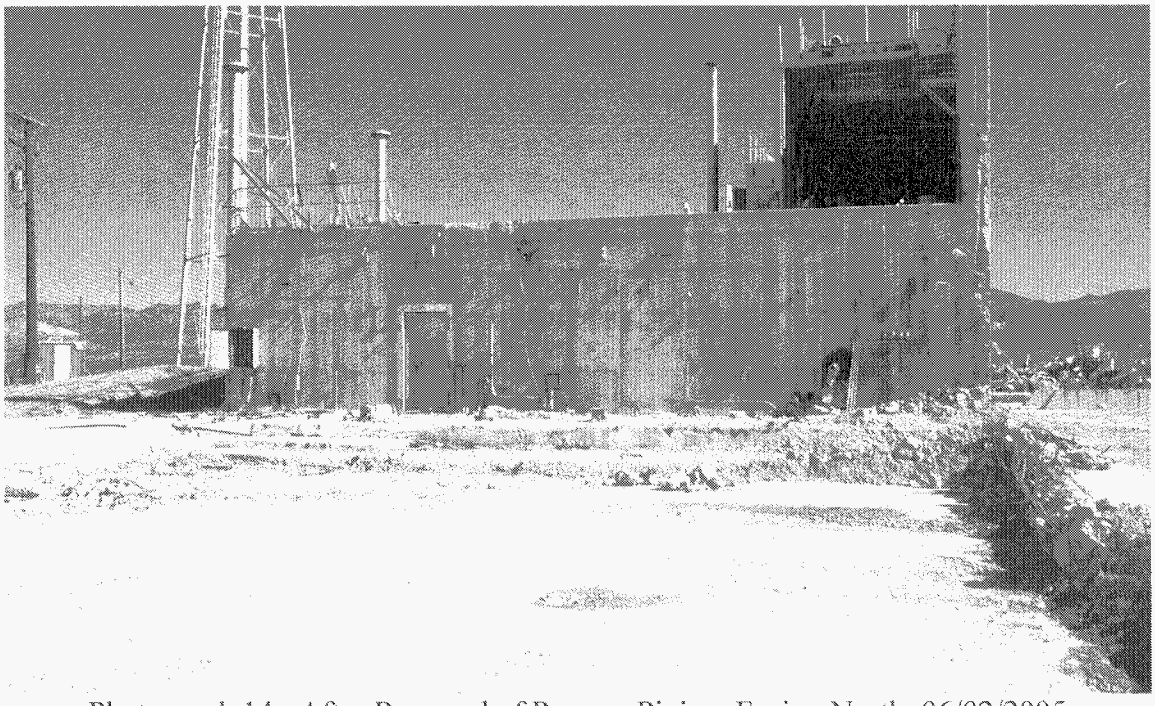
Photograph 10: Decontamination Activities on Roof, Facing West, 06/02/2005

Photograph 11: Exhaust Stack Demolition Debris, Facing West, 06/02/2005

Photograph 12: Moveable Shed Demolition Debris, Facing Southeast, 06/02/2005



Photograph 13: After Demolition of Building 3113B, Facing North, 06/02/2005



Photograph 14: After Removal of Process Piping, Facing North, 06/02/2005

Photograph 15: Demolition of Building 3113A, Facing East, 06/06/2005

Photograph 16: Building 3113A Demolition Debris, Facing North, 06/07/2005

Photograph 17: Demolition of Building 3113, Facing East, 06/07/2005

Photograph 18: Demolition of Building 3113, Facing East, 06/15/2005

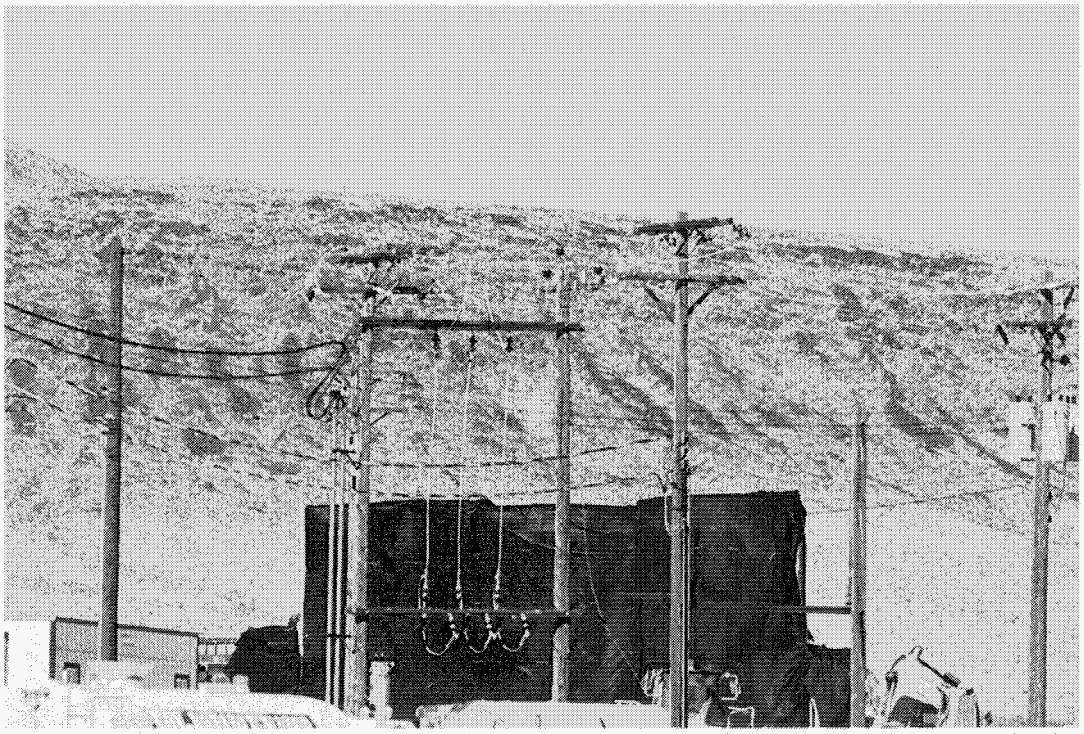
Photograph 19: Demolition of Building 3113, Facing Southeast, 06/15/2005

Photograph 20: Building 3113 Demolition Debris, Facing East, 06/15/2005

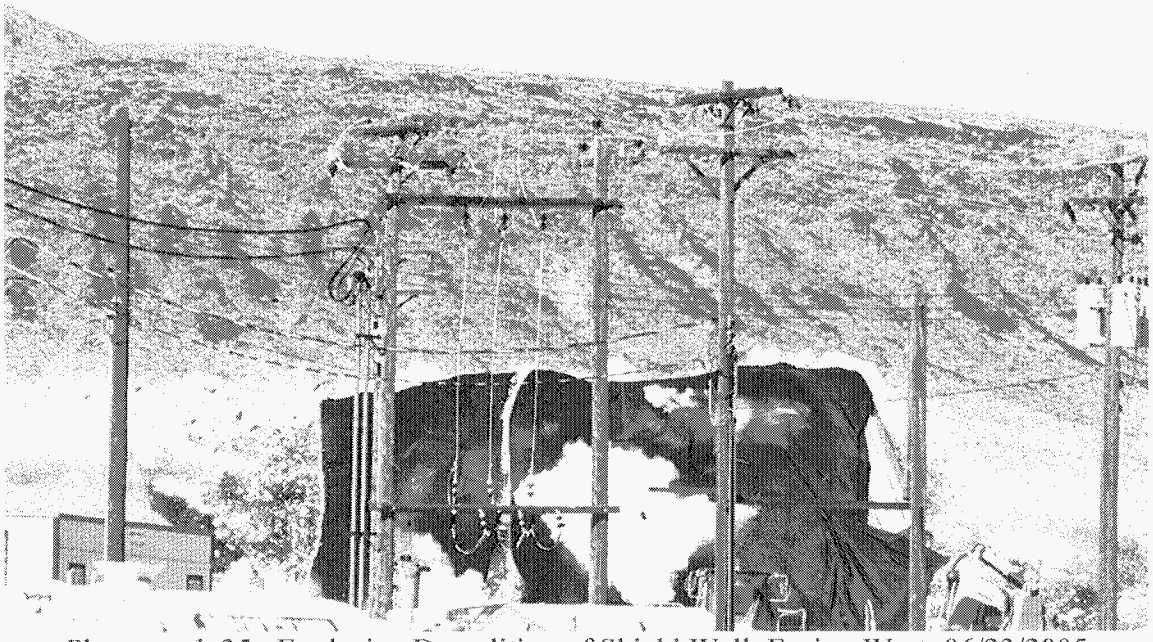
Photograph 21: Shield Wall After Demolition of Building 3113, Facing South, 06/15/2005

Photograph 22: Shield Wall After Demolition of Building 3113, Facing Northwest, 06/15/2005

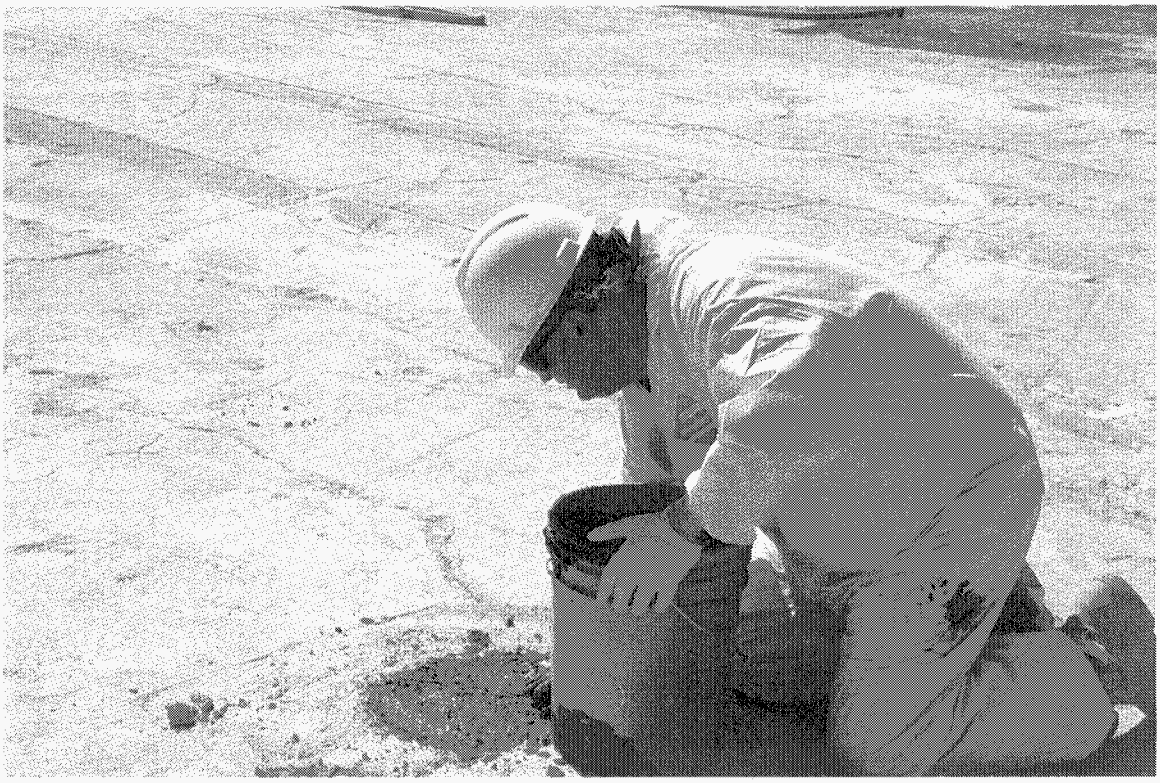
Photograph 23: Drilling of Shield Wall for Emplacement of Explosives, Facing Southwest, 06/21/2005



Photograph 24: Shield Wall Prepared for Explosive Demolition, Facing West, 06/23/2005

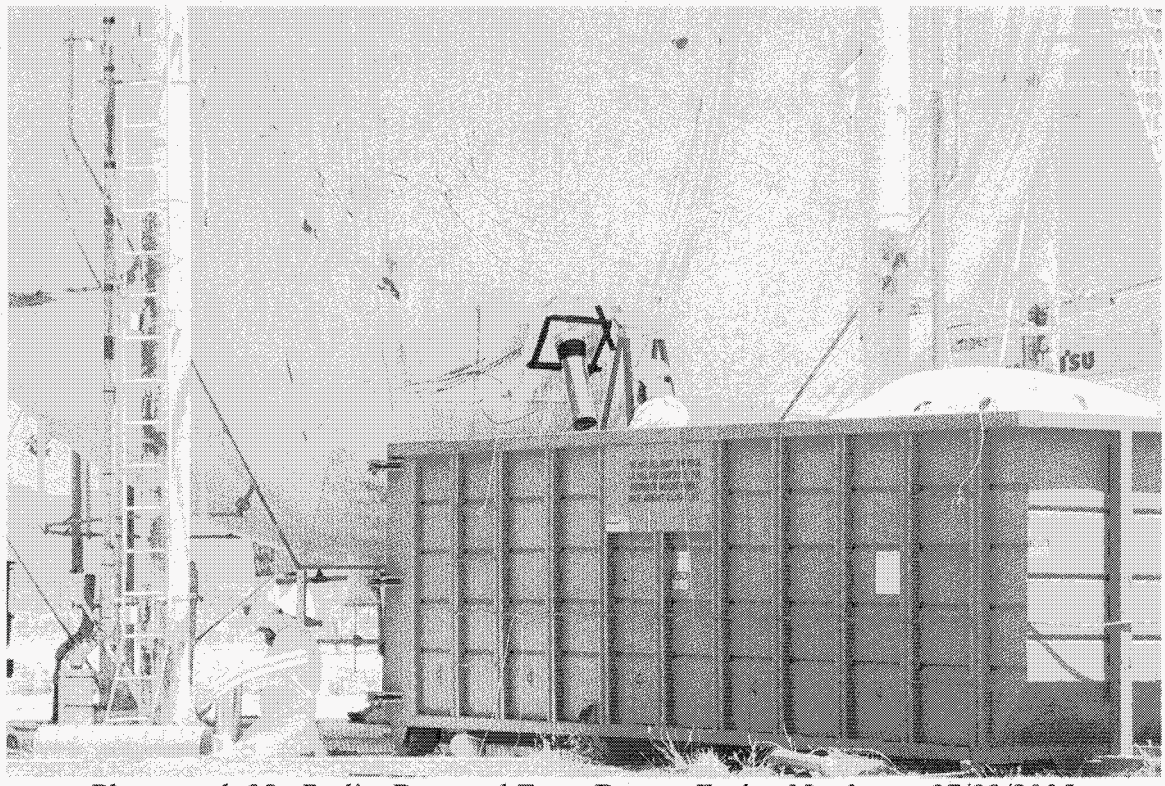


Photograph 25: Explosive Demolition of Shield Wall, Facing West, 06/23/2005

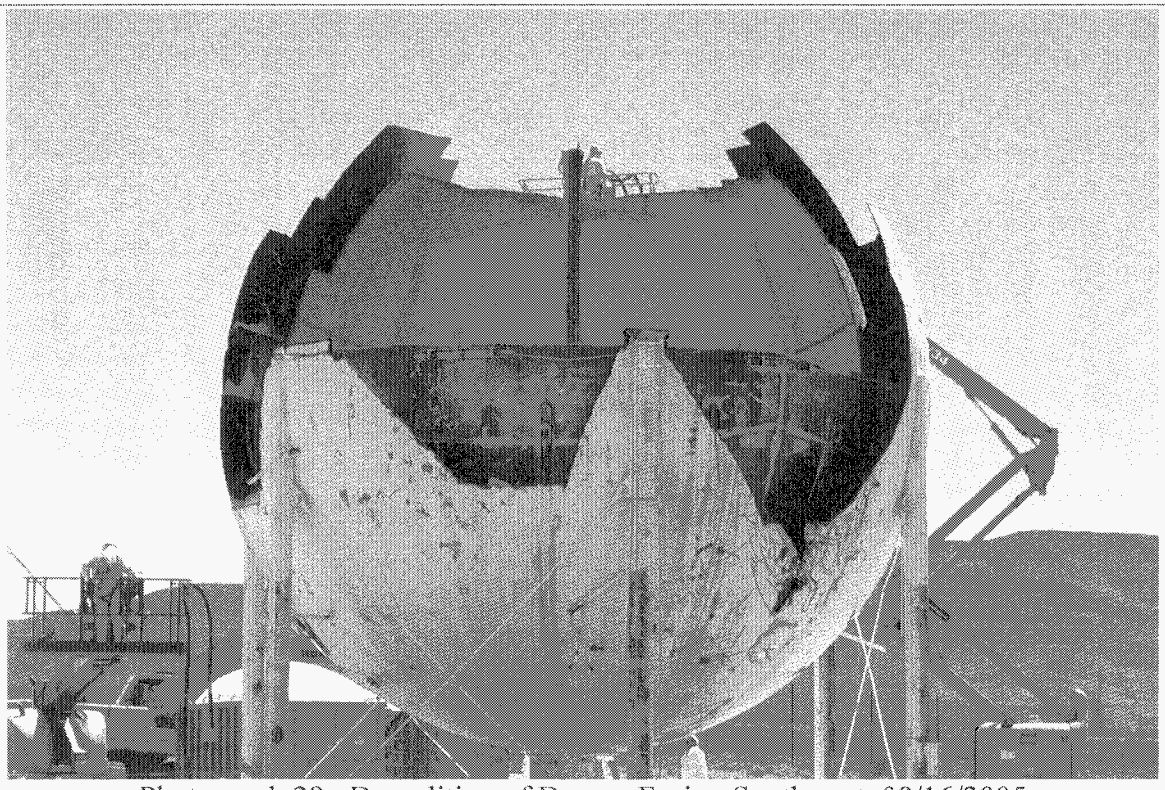


Photograph 26: Grouting of Penetrations, 06/29/2005

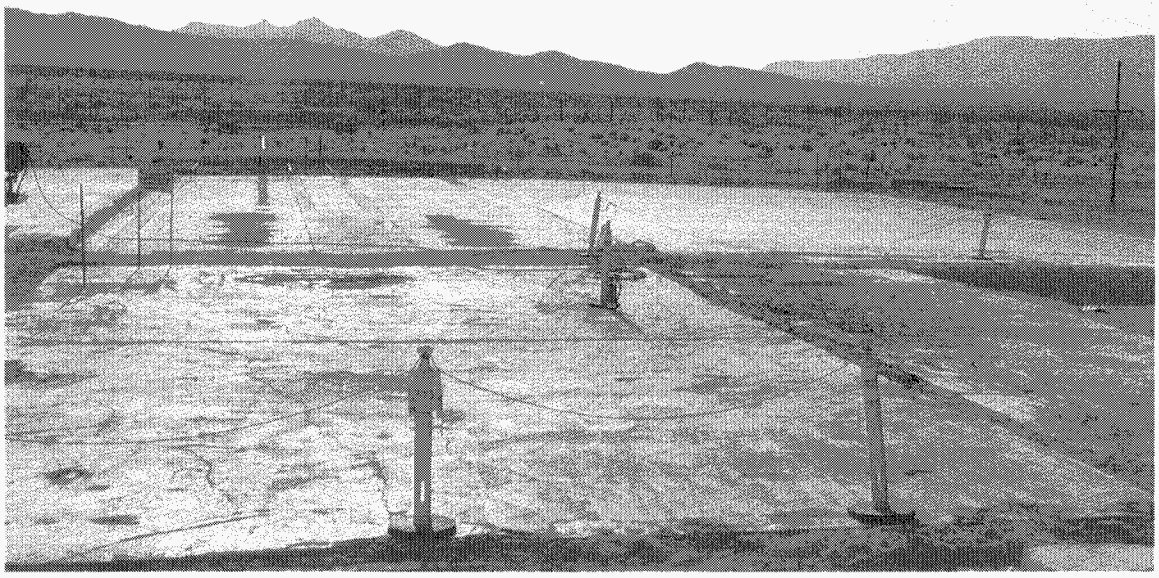
Photograph 27: Low-Level Waste Currently Staged Onsite, Facing North, 07/07/2005



Photograph 28: Perlite Removal From Dewar, Facing Northeast, 07/09/2005



Photograph 29: Demolition of Dewar, Facing Southwest, 08/16/2005



Photograph 30: Final State of Remaining Concrete Foundations, Facing East, 08/22/2005

Photograph 31: Radiological Posting and Use Restriction Warning Sign for Reactor Pad, Facing Southeast, 08/22/2005

APPENDIX G

RECORD OF TECHNICAL CHANGE TO THE SAFER PLAN

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RECORD OF TECHNICAL CHANGE

Technical Change No. SAFER-1 Page 1 of 8

Project/Job No. CAU 115 Date 4/15/05

Project/Job Name Corrective Action Unit 115 Test Cell A Facility SAFER Plan

The following technical changes (including justification) are requested by:

Michael Kruzic (Name) Bechtel Nevada Task Manager (Title)

Description of Change:

1. Page xi, 4th paragraph. Replace the third and fourth sentences with the following:

   Removal of the dewar and concrete structures south and west of Building 3113A are not part of the CAU 115 closure activities, but may be removed as a best management practice. Closure of CAU 115 will be accomplished by completing the following activities:

Justification - This change is needed because the dewar and liquid hydrogen station may be removed as a best management practice. Clean closure will not be obtained. The Radiological Controls Department has determined that the concrete reactor pad, and potentially the soil under portions of the pad, has been radiologically activated. This decision was based on ISOCS analysis conducted on the reactor pad. The ISOCS surveys showed activation products that exceed the criteria for a radiological materials area. The activation products included europium-152 and -154 with maximum concentrations of 21 and 6.4 picocuries per gram (pCi/g), respectively, and cobalt-60 with a maximum concentration of 10.3 pCi/g. Because of this activation, the reactor pad will need to be posted as an underground radioactive material area (URMA) to warn of radiation associated with the matrix of the concrete and potentially activated soil beneath the thin portion of the pad.

2. Page xi, 7th bullet. Replace the seventh bullet with the following sentence:

   Fill all trenches and large cracks on the reactor pad with grout or similar material.

Justification - The newly proposed closure methods for the reactor pad include grouting all of the trenches present on the reactor pad, rather than removing the fixed contamination present on the interior surface. This includes the soil and rail ties located on the eastern portion of the reactor pad and the concrete bottoms of the remainder of the rail trenches and two large trenches. This will cover and shield the fixed contamination located in the trenches, reduce worker exposure to radionuclides during closure activities, and shorten the duration of decontamination activities. There is additional clarification on the change in decontamination activities in Change 26 of this ROTC. Because the reactor pad will already be posted as a URMA from the activation of the concrete and potentially activated soil beneath it, covering the fixed contamination with grout will not change the final radiological posting. The radiological posting will be necessary unless all of the activated concrete and any activated soil beneath it are removed.

3. Page xi, 8th bullet. Delete the second sentence: Dewar not included in the closure of CAU 115.

Justification - This change is needed because the dewar and liquid hydrogen station may be removed as a best management practice. In addition, it has already been mentioned that the dewar may be removed as an option to the demolition subcontract in Change 1 to this ROTC.

4. Page xi, 9th bullet. Replace the sentence with the following:

Perform final radiological surveys to establish proper controls of concrete foundations and reactor concrete pad.

Justification - Final radiological surveys will be conducted in the same method as originally planned, but the reactor pad will not be free released. The concrete foundations will still be surveyed and decontaminated as necessary to be free released. The radiological surveys are discussed further in Change 27 of this ROTC. After reviewing ISOCS results with the Radiological Controls Department, it has been determined that the reactor pad will not be able to be free released as originally indicated in the SAFER Plan. It has been determined that the pad has been activated from tests conducted on the reactor pad. The ISOCS surveys showed activation products that exceed the criteria for a radiological materials area. The activation products included europium-152 and -154 with maximum concentrations of 21 and 6.4 picocuries per gram (pCi/g), respectively, and cobalt-60 with a maximum concentration of 10.3 pCi/g. This has caused the concrete and potentially the soil under the 6" portions of the concrete pad to become radioactive. This includes the surface and the interior composition of the concrete/soil. Because of this, it will not be possible to remove the fixed contamination from the surface of the pad as originally planned. Therefore, unless the entire pad and any activated soil underneath it is removed, it will be radiologically posted. Additional information on radiological posting is located in Change 26 of this ROTC.

5. Page 1, Section 1.0, 1st paragraph. Replace the first sentence with the following:

This Streamlined Approach for Environmental Restoration (SAFER) Plan identifies the activities required for the closure of Corrective Action Unit (CAU) 115, Area 25 Test Cell A (TCA) Facility.

Justification - The proposed changes to the SAFER Plan will require radiological postings around the perimeter of the concrete reactor pad. With this change, this CAU would no longer be considered clean closed. Because of the radiological hazard present within the matrix of the concrete, a use restriction will need to be implemented to prevent intrusive activities. Closure in place with administrative controls will be the required closure alternative because of the radiological posting and use restriction.

6. Page 2, Section 1.2. Replace the first sentence with the following:

Closure of CAU 115 will be accomplished by completing the following activities:

Justification - As indicated in Change 5, the proposed changes to the SAFER Plan will require radiological postings around the perimeter of the concrete reactor pad. Because of the radiological hazard present within the matrix of the concrete, a use restriction will need to be implemented to prevent intrusive activities. Closure in place with administrative controls will be the required closure alternative since the site will require radiological posting and a use restriction.

7. Page 2, Section 1.2. Replace the third bullet with the following sentence:

Fill all trenches and large cracks on the reactor pad with grout or similar material.

Justification - The newly proposed closure methods for the reactor pad include grouting all of the trenches present on the reactor pad, rather than removing the fixed contamination present on the interior surface. This includes the soil and rail ties located on the eastern portion of the reactor pad and the concrete bottoms of the remainder of the rail trenches and two large trenches. This will cover and shield the fixed contamination located in the trenches, reduce worker exposure to radionuclides during closure activities, and shorten the duration of decontamination activities. Additional clarification on the change in decontamination activities in Change 26 of this ROTC. Because the reactor pad will already be posted as a URMA from the activation of the concrete and potentially activated soil beneath it, covering the fixed contamination with grout will not change the final radiological posting.

8. Page 2, Section 1.2, 4th bullet. Replace the second sentence with the following:

Removal of the dewar and concrete structures south and west of Building 3113A are not part of the CAU 115 closure activities, but they may be removed as a best management practice.

Justification - This change is needed because the dewar has been added as an option to the demolition subcontract, but its removal is not included in the fee milestone.

9. Page 2, Section 1.2. Replace the fifth bullet with the following sentence:

Perform final radiological surveys to establish proper controls of concrete foundations and reactor concrete pad.

Justification - Final radiological surveys will be conducted by the same method as originally planned, but the reactor pad will not be free released. The concrete foundations will still be surveyed and decontaminated as necessary to be free released. The radiological surveys are discussed further in Change 27 of this ROTC. After reviewing ISOCS results with the Radiological Controls Department, it has been determined that the reactor pad will not be able to be free released as originally indicated in the SAFER Plan. It has been determined that the pad has been activated from tests conducted on the reactor pad. This has caused the concrete and potentially the soil under the 6" portions of the concrete pad to become radioactive. This includes the surface and the interior composition of the concrete/soil. Because of this, it will not be possible to remove the fixed contamination from the surface of the pad as originally planned. Therefore, unless the entire pad and any activated soil underneath it is removed, it will be radiologically posted. Additional information on radiological posting is located in Change 26 of this ROTC.

10. Page 2, Section 1.2, 2nd paragraph. Change item 4 "provides for clean closure, and" to read as follows:

4) downgrades the site's radiological controls

Justification - The site will not be able to be clean closed, as described in Change 5 to this ROTC, however the radiological controls currently present at the site will be downgraded. Currently the reactor pad is posted as a Contamination Area. After the trenches and cracks are filled with grout, the soil from the NW corner of the pad is removed, and all removable contamination greater than levels listed in Table 4-2 of the NV/YMP Radiological Control Manual is removed from the surface of the reactor pad, the reactor pad can be downgraded to a URMA, as described in Change 26 of this ROTC.

11. Page 2, Section 1.2, 2nd paragraph. Change item 5 to read as follows:

(5) reduces long-term surveillance and maintenance costs.

Justification - Closure activities at Test Cell A, including demolition of the facility and reducing radiological controls, will reduce costs required to conduct yearly surveillance and maintenance activities. This includes radiological, structural, and hantavirus surveys and corrective activities. Once the facility is brought to slab-on grade conditions, only yearly radiological surveys will be required to ensure that use restriction signs and radiological postings remain in good condition. Therefore, closure activities will reduce the long-term surveillance and maintenance costs but not entirely eliminate them.

12. Page 2, Section 1.2, 3rd paragraph. Replace the last two sentences with the following:

Radiologically controlled areas outside of CAU boundaries do not require use restrictions. CAU 115: Area 25 TCA Facility will be demolished to slab-on-grade and closed with administrative controls. A use restriction will be imposed for the footprint of the concrete reactor pad.

Justification - The first sentence was modified to clarify that the soil posted around the facility, currently an RMA, will not require a use restriction after closure, since this area is not part of CAU 115. The second sentence was changed because of the radiological hazard present within the matrix of the concrete, the underground drain line under the pad, and the potentially activated soil under the thinner portions of the reactor pad. Closure in place with administrative controls will

be the required closure alternative since the concrete reactor pad will require radiological posting and use restriction. The use restriction will be implemented to prevent intrusive activities on the pad.

13. Page 2, Section 1.3, 3rd bullet. Replace the sentence with the following:

Fill all trenches and large cracks on the reactor pad with grout or similar material.

Justification - The proposed closure methods for the reactor pad include grouting all of the trenches present on the reactor pad rather than removing the fixed contamination present on the interior surface. This includes the soil and rail ties located on the eastern portion of the reactor pad and the concrete bottoms of the remainder of the rail trenches and two large trenches. This will cover and shield the fixed contamination located in the trenches, reduce worker exposure to radionuclides during closure activities, and shorten the duration of decontamination activities. Additional clarification on the change in decontamination activities in Change 26 of this ROTC. Because the reactor pad will already be posted as a URMA from the activation of the concrete and potentially activated soil beneath it, covering the fixed contamination with grout will not change the final radiological posting.

14. Page 3, Section 1.3, 5th bullet. Replace the sentence with the following:

Performance of final radiological surveys to establish proper controls of concrete foundation and pads.

Justification - Final radiological surveys will be conducted in the same method as originally planned, but the reactor pad will not be free released. The radiological surveys are discussed further in Change 27 of this ROTC. After reviewing ISOCS results with the Radiological Controls Department, it has been determined that the reactor pad will not be able to be free released as originally indicated in the SAFER Plan. It has been determined that the pad has been activated from tests conducted on the reactor pad. The activation products identified during ISOCS analysis included europium-152 and -154 with maximum concentrations of 21 and 6.4 picocuries per gram (pCi/g), respectively and cobalt-60 with a maximum concentration of 10.3 pCi/g. This has caused the concrete and potentially the soil under the 6" portions of the concrete pad to become radioactive. This includes the surface and the interior composition of the concrete/soil. Because of this, it will not be possible to remove the fixed contamination from the surface of the pad as originally planned. Therefore, unless the entire pad and any activated soil underneath it is removed, it will be radiologically posted. Additional information on radiological posting is located in Change 26 - Section 3.2.8 of this ROTC.

15. Page 3, Section 1.4. Replace the first sentence with the following:

This SAFER Plan has been developed to support the closure of CAU 115 as required by the FFACO, DQOs, and Project Organization (presented in Appendices A.1 and A.2).

Justification - The proposed changes to the SAFER Plan differ from those originally presented in DQOs. CAU 115 will not be clean closed, rather closed in place with administrative controls. Closure in place with administrative controls will be required because the site will be radiologically posted around the perimeter of the concrete reactor pad. In addition, a use restriction will be required to prevent intrusive activities from being conducted on the pads.

16. Page 4, Figure 1. Replace the box following hold point #3, "Decontaminate radiologically contaminated pad to DOE 05400.5" with the following:

Fill all trenches and large cracks on reactor pad with grout or similar material.

Justification - As described in Change 7 of this ROTC, decontamination activities on the reactor pad will not be conducted to remove fixed surface contamination. Because the matrix of the concrete is activated, it will not be possible to remove the contamination without removing the entire concrete pad and any potentially activated soil beneath it. Therefore, if the trenches are filled with grout, covering the fixed contamination present at the bottom, the final pad posting will be the same. In addition, the grout will cover and shield the fixed contamination located in the trenches, reduce worker exposure to radionuclides during closure activities, and shorten the duration of decontamination activities.

17. Page 12, Section 2.3.1.1, last paragraph. Replace the last sentence with the following:

Details on decontamination of the reactor pad are discussed in Section 3.2.8.

Justification - Change number 26 of this ROTC adds detail into Section 3.2.8 of the SAFER Plan to identify how and where the proposed decontamination activities will take place. This change is necessary since the only planned decontamination activities on the concrete reactor pad will be conducted after demolition activities, as described in Change 26 - in Section 3.2.8 of this ROTC.

18. Page 15, Section 2.4, 2nd paragraph Replace the second sentence with the following:

Removal of the dewar and concrete structures south and west of Building 3113A are not part of the CAU 115 closure activities, but they may be removed as a best management practice.

Justification - This change is needed because the dewar has been added as an option to the demolition subcontract, but its removal is not included in the fee milestone.

19. Page 15, Section 2.4.1 Replace the first two paragraphs with the following:

Prior to demolishing the facility, all of the trenches and large cracks on the reactor concrete pad will be grouted or filled with similar material to minimize personnel exposure to fixed contamination within the trenches. After demolition of the moveable shed, Building 3130, additional grouting of two trenches partially covered by the shed will be conducted. After grouting and demolition activities are complete, the reactor concrete pad (Figure 11) and concrete foundation will be radiologically surveyed. Post-demolition surveys of the remaining concrete foundations and pads will be conducted as described in Section 3.2.9.

Justification - This section has been modified from the original SAFER Plan because it has been proposed to grout the fixed contamination present in the bottom of the trenches, rather than chipping these portions out. Reasons for this proposed method are detailed in Change 2 of this ROTC.

20. Page 17, Section 2.4.2, 2nd paragraph. Delete the first two sentences from the paragraph to read as follows:

Below-grade piping under the foundation of Buildings 3113, 3113A, and 3113B, the concrete reactor pad, or below- or above-ground piping beyond the boundaries of this CAU, will not be addressed in the closure of CAU 115.

Justification - This paragraph has been modified to concur with the proposed modification of the closure activities on the reactor pad. Because the concrete reactor pad has been activated, it will remain radiologically posted after closure activities. The removal of the underground pipeline will not affect this posting. By not removing the drain pipeline under the reactor concrete pad, there is less potential for personnel to be exposed to unknown quantities of radionuclides present within the pipe. Also the amount of time spent conducting removal activities on the reactor pad and the quantity of LLW generated will be reduced.

21. Page 19, Section 3.0. Replace the third paragraph with the following:

Closure of CAU 115 will be accomplished by removal of hazardous or regulated materials, demolition and disposal of the above-grade structures (Buildings 3113, 3113A, 3113B), filling of all trenches and large cracks on the reactor pad with grout or similar material, and decontamination of remaining concrete foundations, if necessary. Building 3130, the Movable Shed, will also be demolished as part of the closure. Removal of the dewar and concrete structures south and west of Building 3113A are not part of the CAU 115 closure activities, but they may be removed as a best management practice.

Justification - As described in Change 5 of this ROTC, CAU 115 will not be able to be clean closed, but rather closed in

place with administrative controls due to the reactor concrete pad. This paragraph was modified to remove the word "clean closure" for this reason. In addition, grouting of the trenches on the reactor pad was added to the list of closure activities. This activity was added because grouting activities on the reactor pad is a necessary step to reach the closure alternative proposed in this ROTC. This involves covering the fixed contamination in the bottom of the trenches with grout to keep personnel and debris from demolition activities from entering. In addition, the last sentence regarding the dewar and concrete structures south and west of B. 3113A was modified to allow their removal during demolition activities as a best management process if funding and manpower are available.

22. Page 24, Section 3.2. Replace the third bullet with the following sentence:

Fill all trenches and large cracks on the reactor pad with grout or similar material.

Justification - The newly proposed closure methods for the reactor pad include grouting all of the trenches present on the reactor pad rather than removing the fixed contamination present on the interior surface. This includes the soil and rail ties located on the eastern portion of the reactor pad and the concrete bottoms of the remainder of the rail trenches and two large trenches. This will cover and shield the fixed contamination located in the trenches, reduce worker exposure to radionuclides during closure activities, and shorten the duration of decontamination activities. Additional clarification on the change in decontamination activities is given in Change 26 of this ROTC. Because the reactor pad will already be posted as a URMA from the activation of the concrete and potentially activated soil beneath it, covering the fixed contamination with grout will not change the final radiological posting.

23. Page 24, Section 3.2, 4th bullet. Delete the second sentence: Dewar not included in the closure of CAU 115.

Justification - This change is necessary to clarify that the dewar has been added as an option to the demolition subcontract, but its removal is not included in the fee milestone. If funding and manpower are available, this option may be pursued.

24. Page 24, Section 3.2. Replace the fifth bullet with the following:

Perform final radiological surveys to establish proper controls of concrete foundation and reactor pad.

Justification - Final radiological surveys will be conducted by the same method as originally planned, but the reactor pad will not be free released. The concrete foundations will still be surveyed and decontaminated as necessary to be free released. The radiological surveys are discussed further in Change 27 of this ROTC. Additional detail on why the reactor pad will not be free released is discussed in Change 4 to this ROTC.

25. Page 26, Section 3.2.5. Delete the last paragraph of this section.

Justification - The deleted paragraph discussed the removal of the piping from the concrete reactor pad. Because the reactor pad has been activated, it will remain radiologically posted after closure activities; therefore removal of the underground pipeline will not affect this posting. By not removing the pipeline, there is less potential for personnel to be exposed to unknown quantities of radionuclides present in the pipe. Also the amount of time spent conducting activities on the reactor pad and the quantity of LLW generated will be reduced.

26. Page 28, Section 3.2.8. Replace the first paragraph with the following:

Radiological contamination will be removed primarily by scabbling of concrete surfaces, removal of concrete with either hand tools or heavy equipment, or by wiping or vacuuming methods. All concrete surfaces left after demolition activities will be surveyed as described in Section 3.2.9.

ISOCS analysis conducted at nine locations on the reactor pad has shown that the concrete has been radiologically activated. ISOCS analysis detected activation products, including europium-152 and -154 and cobalt-60, which exceed the criteria for a radiological materials area. Concrete activation is where the matrix of the concrete, rather than just the surface, has become radioactive from neutrons passing into it during reactor test activities. Because of this activation, hand-held radiological survey instruments indicate contamination levels above those listed in Table 1 for fixed contamination. This radiation cannot be removed by chipping off the surface layer of concrete, because the entire pad down to soil is expected to be activated, if similar to the activation depth seen in

core samples from the shield wall. However, any areas with removable contamination detected above Table 1 limits, from swipe surveys, will be decontaminated. Fixed contamination is present in the form of soil and hot particles deposited in the base of the large trenches, rail trenches, and within porous railroad ties on the east side of the reactor pad. These areas of the concrete reactor pad will be filled/covered with grout or similar material to minimize the amount of worker exposure to the elevated levels of radioactivity. The fixed contamination at the bottom of the trenches will remain in place and will not affect the final posting of the reactor pad. The final posting of the concrete reactor pad will be a URMA due to the activated concrete and potentially activated soil beneath the thinner portions of the pad.

Justification - This section has been added to the work package to detail the proposed changes to the decontamination of the reactor pad trenches. As indicated in the change above, the pad will remain a URMA after closure, and the removal of the fixed contamination in the rails will not affect the site closure of the pad. Once this was determined, the risk associated with removing the fixed contamination from the rail trenches was re-evaluated. The above change has been proposed to reduce the amount of potential exposure to the workers from high levels of fixed contamination in the rail trenches and rail ties located on the east side of the reactor pad. In addition to reducing worker exposure, the amount of low-level waste generated from the pad will be significantly reduced, along with the number of days spent conducting decontamination activities and packaging waste in this area.

27. Page 28, Section 3.2.9, 1st paragraph. Replace second and third sentences with the following:
Surveys will be completed using survey instruments and methods described in Section 3.2.7.1 and Section 3.2.7.2. If surveys indicate the presence of radiological contamination, excluding fixed contamination on the reactor pad, decontamination and subsequent verification surveys will be completed.

Justification - The referenced Sections in the first sentence have been changed since the Section numbers in the SAFER Plan were incorrect. They have been changed to reference the correct sections. The second sentence was changed to match the changed decontamination activities on the reactor pad described in Change 26 of this ROTC.

28. Page 28, Section 3.2.9, 3rd paragraph. Replace the last sentence with the following:
Radiological signs will be placed on four sides around the reactor pad no further than 30.5 m (100 ft) apart. Because the reactor pad will be posted as a URMA and is covered under CAU 115, a use restriction for this area will be required. Use restriction signs will be posted at the four corners of the reactor pad. Post-closure monitoring and posting requirements will be defined in the CR. Figure 14 shows the most likely posting scenario for the concrete reactor pad. Any changes to this configuration during closure activities will be documented in the CR.

Justification - This sentence has been added to the last paragraph to provide detail on how the site will be posted after closure. This can be seen on the attached figure.

30. Page 29, Section 3.5. Replace the fifth bullet with the following:
Decontamination of the remaining concrete foundations and filling all trenches and large cracks on the reactor pad with grout or similar material.

Justification - The second half of the sentence was changed to include the change in closure activities on the concrete reactor pad. Removable contamination on the pad will be removed, but the fixed contamination present in the trenches will be covered by grout, as discussed in Change 26 to this ROTC.

31. Page 33, Section 5.2. Replace the first sentence with the following:
The waste streams that will be generated during closure of CAU 115 are discussed in the following sections.

Justification - The words "clean closure" have been removed from this sentence because the site will closed with administrative controls under the proposed changes to the SAFER Plan, as described in Change 5 - Section 1.0 of this ROTC.

The project time will be decreased by approximately 6 days.

Applicable Project-Specific Document(s): ***Streamlined Approach for Environmental Restoration Plan for Corrective Action Unit 115: Area 25 Test Cell A Facility, Nevada Test Site, Nevada, Revision 1***

Approved By: Sabine Curtis Date 4/15/05
NNSA/NSO Project Manager

Date 4/15/05
NNSA/NSO Environmental Restoration Division Director

Don Cole Date 4/15/05
NDEP

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